AMERICAN AGRICULTURIST.

Agriculture is the most healthy, the most useful, and the most noble employment of man.—WASHINGTON.

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AND

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WORK FOR JANUARY, NORTH AND WEST.

Felling Timber, Fencing Stuff, &c.—Early winter, let it be remembered, is the proper season for cutting all kinds of hard-wood timber while the sap is low, but that of pine should be cut late in spring, when the pores of the wood is filled with resin, or pitch. Get out your stuff for posts and rails, and fashion them into shape, in order that they may be

in readiness to put up in spring. Cut and pile a sufficient supply of fire wood, this month, to last a year, in order to be hauled home when dry, as it is needed.

Threshing Grain and Shelling Corn.—See that these are attended to, if not done before, and carefully stored, free from vermin or wet, in order to be ready for a favorable sale. If you have much of this work to do, money will be saved by procuring the best machines designed for this purpose.

Winter Plowing.—Take advantage of every opportunity that offers during the winter months, and plow stiff soils intended for seeding in spring; but be sure and not meddle with such grounds while they are wet.

Care of Stock, &c.—See that all domestic animals are provided with proper food and drink (not ice water if it can be avoided), as well as with shelter and warmth. Interest no less than humanity dictate attention to their comfort and wants. Their yards, sheds, and stables should be perfectly dry. Cleanliness is not always to be expected, and in many instances is incompatible with economy, as the proper mixing of the manure with the vegetable matters, peat, turf, &c., in the yard, frequently requires that the manure be scattered all over it. But they must be kept out of the mire at all times and in all weathers. They should be under shelter in all severe storms or excessive cold; and they will thrive better, if in warm but well ventilated stables throughout the winter. Warm, dry shelter saves food as well as preserves health, and the rent of $100 well laid out in proper buildings and sheds will go much further than the interest on $100 in provender. The cows, mares, ewes, &c., that are coming in the ensuing spring, should be particularly looked after, and well, but not profusely fed. As they advance towards their time, they must be supplied with ample room. Separate stalls (box stalls), where they can be loose and free from disturbance from others, are particularly necessary with heavy or infirm animals; and in cold weather, this is essential for all the ewes and sows, equally with the largest animals.

Kitchen Garden.—Hot beds should now be made in the middle and western states by those desirous of having very early vegetables, such as lettuces, endive, dwarf cabbages, cauliflower, broccoli, parsley, asparagus, radishes, &c. By some attention, a great many little comforts may be procured in this way, and, if you live near a market, enough may be sold from your early vegetables to produce a profitable return.

Fruit Garden and Orchard.—Examine your orchards, and cut off all dead limbs close to the trunks or branches; scrape off the moss, and destroy all the chrysalides of cocoons or insects you can find. General pruning should be left until summer. Root-grafting may be performed this month as well as the next.

Flower Garden and Pleasure Grounds.—Should the ground continue open, hardy bulbs may be planted; if frozen, large trees may be transplanted, with a mass of earth adhering to the roots. Perform any work that may tend to forward the business of spring.

WORK FOR JANUARY, SOUTH.

As a considerable portion of the directions given in the work for north and west, this month, will apply to the south, it is not deemed necessary to repeat them here.

Grinding and Planting Sugar Cane.—Do not grind your canes any faster than they mature, for the sake of finishing your harvest. For, where hard frosts do not occur, it will sometimes be advantageous to allow them to continue in the ground until February; as then, their juices will be in a richer state. But, should the heavy frosts set in before the crop is ground, the canes will be so affected that their juice can no longer be crystalized. This may be obviated, however, by cutting and grinding them before they thaw.

Finish planting canes this month, if the season requires it, covering them to the depth of about three inches, but not too closely together.

Sowing Tobacco Seed.—In the early part of this month, if it has not been done in December, select a spot of ground, prepare the necessary beds and sow your tobacco seed. Make the beds, if possible, on land newly cleared, or at least on land that has been seeded with grass. Break up the ground properly, grub up the small stumps, draw out the roots with a root puller, or carefully remove them by hand. Make the beds from three to four inches high, of a convenient length and from three to three and a half feet in breadth, so as to enable the fingers, at arm's length, to weed out the young plants from both sides of the bed. Before the seed is sown, take some dry trash, and burn upon the beds in order to destroy insects and the seeds of grass, or vile weeds. Take one ounce of tobacco seed, mix it with a quart of dry ashes, so as to separate it as much as possible, and sow it broad-cast in the beds. Then slightly rake the surface, roll or tread it down with your whole weight, in order that the ground may at once closely adhere to the seed, and sprinkle with rain or river water, if not sufficiently supplied by showers. Should the beds become dry from the sun, or blasting winds, watering should constantly be repeated until the young plants are large enough to remove. Keep the surface of the beds in a moist state, well stirred, and the plants clear of weeds.

Kitchen Garden.—Plant artichokes, garlic, asparagus, egg plant (under frames), chervil, northern cabbage, cress, shalots, spinach, lettuce, broad-leaved endive, dwarf beans (end of the month), Windsor beans, lentils, mustard, parsley, radish (round and long), roquet, carrots, tomatoes (under frames), peppers, northern turnips, peas, cauliflower (in beds), sweet potatoes, early corn, Irish potatoes. Transplant early cabbages from hot beds; also onions, either young plants or dry sets.

Fruit Garden, Shrubbery, &c.—Continue to plant cuttings of grapevines, fruit and shade trees, &c.

Sowing Osage-Orange Seeds.—Mr. Munn, of Kentucky, recommends us to soak the seeds of this plant in warm water, one or two days, until they swell; or soak them 24 hours when they should be tied up in a bag, and buried in moist earth, examining them every week until sprouted, after which, sow the usual way.

ROUGH NOTES BY THE WAY.—No. 5.

Farm of Mr. Maillard.—On my return to Philadelphia, I accidentally met my excellent young friend, Mr. Adolphus Maillard, who was so polite as to insist upon my accompanying him home to his hospitable residence at Bordentown.

His farm consists of about 600 acres, and was formerly part of the estate of the late Joseph Bonaparte. The mansion, gardens, and park, having been offered and since sold for $30,000 separately, Mr. M. wisely declined these, thinking that an excellent and venerable old house, nearer the centre of the domain, more convenient for him, near to which is a farm house and outbuildings, quite sufficient for all his present wants.

The soil of this farm is mostly a sandy loam, and when Mr. Maillard came into possession, he found it greatly exhausted by previous years of constant cropping, without a suitable return of manure. He has now made an additional purchase of 40 acres of muck meadow, lying on the margin of the Delaware River. From this he is hauling large quantities of muck to make into compost, and is also liberal in the application of lime, ashes, bone dust, but more especially guano, which has done wonders for his soil thus far. He has also discovered marl on his farm, which he is using liberally. But I must warn my readers not to entertain too extravagant notions, and expect too much at once. Improvements of the soil are necessarily slow; nature will not be forced beyond a certain pitch, and we must leave it for time to put its seal upon them. Considering, however, the short time Mr. Maillard has been at work here, his crops looked remarkably well, and were very abundant. He had thirty-four different kinds of grass and grain growing, several of which were for experiment. Among these I was particularly struck with a superior kind of wheat which he had brought home with him from Italy. After harvesting it, he employed women and children to select the largest and most perfect grown heads, and to shell them by hand; and from the seed of these throw out all the inferior grains. What is left, he intends to sow on clean, well prepared ground, and so follow up the result. His exertions cannot but be crowned with success; for improvement in seed is just as sure to follow such a course, as improvement in stock when breeding from well-selected animals.

Mr. M. has laid the foundation for an excellent stock. He has several very fine pure shorthorns, also Ayrshires of approved milking families. The bulls he is breeding to a choice selection of native dairy cows. This is the true way to make us independent of foreign importations. I am a great advocate for improving the natives—home manufactures is my motto.

I noticed here an excellent roadster stallion; a descendant from the famous Long-Island trotter, Andrew Jackson. I will defy the world to beat the United States for good roadsters; and we ought to be exporting them largely for the improvement of European stock; and might do it if we would go to work right, to bring it about.

The pigs here are very fine, being mostly the beautiful Suffolk and their crosses. Query. Can a pig be called a beauty? I suppose so *for a pig*, the same as a Hotentot *for a Hotentot.*

Since my visit to Mr. Maillard, I notice in a New-Jersey paper, that he was quite successful at the Burlington County Agricultural Show, in October last, where he received several first premiums for the best display of different kinds of animals, grain, &c.; all of which he generously handed over to the society, to be offered again at their next annual show.

In implements, I found Mr. M. equally liberal; for he supplies himself with such as have proved to be the best. As an example of these, he has got up a circular horse power for one or four horses, as desired. With this, he moves a threshing machine, fan mill, circular saw, small grist mill, grindstone, cornsheller, and strawcutter, which greatly saves in the labor of men.

Mr. M. has some other things in progress, of which I should like to speak, were it not for fear of proving tedious to the matter-of-fact readers of the Agriculturist. I will therefore finish my observations here for the present, by giving a brief detail of a potato experiment which he made in 1847. When his crop was dug, he found the rot very prevalent. He immediately gathered all that seemed in the slightest degree affected by it, and put them into his steam vat, and thoroughly cooked them. They were then packed down hard in common hogsheads. These he fed to his stock during the winter; and what remained in the spring proved as sweet and good as when first put down. I ate some myself to be convinced of the fact. Had he not resorted to this cheap and simple method of saving them, he is positive all would have been lost. He purchased of his neighbors large quantities in the same diseased state, and saved them with the same success. SAMUEL ALLEN.

New York, December 6th, 1848.

AMERICAN INDESTRUCTIBLE MINERAL PAINT.

MR. WILLIAM BLAKE, of Akron, Ohio, discovered a singular metallic substance, about four years since, in a strata of rock, in the township of Sharon, not far from his residence, which, when taken from the mine, had all the appearance of the finest indigo, and no harder than cold tallow, but upon a few days exposure, it became a hard stone or slate.

After a course of experiments, engrossing his artention for two years, he ascertained that, by reducing it to a fine powder, and mixing with linseed oil to the consistency of thick paint, and applying with a brush to wood, iron, tin, zinc, or brick, it became, after a few months' exposure, perfectly hard, and it is said, indestructible.

The utility of the article since its discovery, is represented to have been tested in various ways. As a protection against fire it is invaluable; being impervious to air or water it prevents conbustion, the fire actually charring the wood, instead of igniting it. At the west it is in large demand for covering roofs of buildings, for decks of steamboats and railroad cars, for bridges and fences, carriage work, fire-proof safes, cement for air-tight stoves, &c., &c. It can be applied to shingled roofs, matched boards, or any of the metals with equal success.

Bearing a very high polish when applied to wooden mantel fronts, centre and pier tables, its appearance is not inferior to the finest marble.

BREEDING AND MANAGEMENT OF SWANS.

Those who wish to make themselves acquainted with the habits and dispositions, as well as the mere figures and descriptions of animals, should know that all living creatures cannot be divided into two distinct ranks of *wild* and *tame*, but that there is a most perplexing intermediate multitude, neither wild nor yet tameable, but usually spoken of as "familiar," or "half-domesticated," a term without meaning—dodging, like "squatters," on the offskirts of human society, but determined never to enlist in the drilled and disciplined ranks, playing the game of "off and on," but always ending with the "off." Such, among many others, are the partridge, rats and mice, and at a still greater distance, it is believed, is the whole genus of swans.

Swans, then, are *feræ naturæ* to all intents and purposes; yet, although capricious birds, wild in their very nature, like most living creatures, they have some attachment to place. The first point, therefore, is to settle them agreeably in their destined home. Old birds are less likely to be contented with a new abode, unless very distant from their former one. Cygnets may be procured every autumn; if they have been put up to fat for some time so much the better, as they will the sooner become manageable, and content with a small range. The disadvantage of having cygnets to begin swan-keeping with is, that they are less ornamental till they have attained their perfect plumage, and the proper orange color of the bill, and that they do not breed till their third year. It is not, however, generally known that the male is capable of increasing his kind a year earlier than the female, so that a brood may be obtained from an old hen, and a cock bird in his second year. In selecting a pair, the great thing is to make sure of having two birds of opposite sexes. Two cock birds will not live together, and their mutual aversion would soon show that all was not right; but two hens will—which is the case also with pigeons.

The Swan.—Fig. 1.

In selecting any water birds whose plumage is alike in both sexes, and which cannot, therefore, be distinguished with certainty, the best rule is to see them in the water, and take that which swims deepest for the female, and that which floats with greatest buoyancy for the male, remembering that, as a general rule, all creatures of the masculine gender have the largest lungs in proportion to their size. The neck of the cock swan is usually thicker. An experienced eye will, besides, detect a certain feminine gentleness and modesty in the one, and an alacrity and boldness in the other, which is a tolerably safe guide, as well as an appropriate and becoming attribute to the creatures themselves.

Supposing the reader to have obtained two cygnets that are not mere friends, but actually husband and wife, he will recollect that those reserved for fatting are never pinioned, lest it should check their progress, and he will request the operation to be performed before he has them home, in order that they may have the fewest possible disagreeable reminiscences connected with the spot where they are to spend their lives. The amputation of the part of the wing which corresponds to our hand is quite sufficient to prevent the flight of the short-winged species, as far as migration is concerned, disfigures them less than the closer pruning, and still leaves them the means of escape from a dog, allows them now and then, in their gambols, to fancy they are free, and to enjoy a sort of half-run, half-fly, from the lawn into the water. Kindness, comfort, and good feeling must be employed to keep them at home as far as possible; but the loss of the last wing will not be enough to prevent their flight. It is recommended that the female be pinioned at the wrist, the male at the elbow, trusting to their mutual attachment to keep the less-maimed bird from deserting her mate. But however it be done, let it be set about in a workmanlike manner; no chopping—no hacking—no hewing, nor butchering. Many cygnets are annually killed by the clumsy way in which their wing is lopped off. They suffer from the shock to their nervous system.

A skilful operator will feel for the joint, divide the skin, and turn the bone neatly out of the socket. He should be allowed to shed just one drop of blood—no more. We would be as hard upon him as Portia was upon the flesh-cutting Jew.

> "This bond doth give thee here no jot of blood;
> The words expressly are, a limb of swan;
> Take then thy bond, take thou thy limb of swan;
> But, in the cutting it, if thou dost shed
> One drop of cygnine blood, thy clumsiness
> Shall brand the name of 'Bungler' on thy back.
> Therefore, prepare thee to cut off the limb,
> Shed thou no blood; nor cut thou less, nor more
> But just the very limb; if thou tak'st more
> Or less, than just the limb, thou shalt bewail
> The consequence."

If any brook runs into and from the pond where they are to remain, their escape through that channel must be prevented by netting, hurdles, pales, or other fencing, which should be continued some distance inland, lest they should walk away, if they cannot swim away. This precaution will be found particularly necessary if there is any main stream in the immediate neighborhood. A feeding trough

may be fixed for them in the pond, in the part where it is most desirable that they should be accustomed to display themselves. The trough must be fixed in the pond on two firm posts, within arm's length of the shore, raised high enough from the water to prevent ducks from stealing the food contained therein, having a cover which lifts up by hinges, and so forms a lid, to keep out rats and open only in front. Many persons, however, feed their swans by simply throwing the corn, or grain, into shallow water. They will skim the surface for the light grains which float, and then submerge their heads in search of that which has sunk. But it is cruel to locate a pair of swans for the sake of their beauty in a new-made piece of water whose banks and bottom are as barren and bare as the inside of a hand basin. A load or two of water weeds should have been thrown in, the previous spring, to propagate themselves and afford pasturage. Swan food exists in proportion to the shallowness and foulness, not to the extent and clearness of the water. A yard of margin is worth a mile of deep stream.

In confined waters, swans require a liberal supply of food in the autumn, when the weeds run short. It should be remembered that at this season they have to supply themselves with a new suit of clothes, as well as to maintain their daily strength. If they have not been taught to eat grain, and have not acquired a notion of grazing, they will perish from starvation. Young birds are apt to be fanciful or stupid, and have not sense enough to come on the bank and eat grass, or pick up the threshed corn, or grain, which may be thrown down to them. Sometimes they may be tempted with a lock of unthreshed barley or oats, thrown, straw and all, into the water, which they will instinctively lay hold of and devour. Cygnets, which have been previously put up to fatten, will give little or no trouble in this respect, besides the advantage of being accustomed to the near approach of their feeder.

ADULTERATION OF FOOD.—No. 7.

Lozenges, Confectionary, &c.—There are few articles in common use more subject to adulteration than lozenges and similar preparations consumed by children. Not only are substances added to them, which are cheaper than the sugar in their composition, but others, also, of a very deleterious character, such as preparations of lead, arsenic, copper, &c., for the purpose of coloring.

The substances usually employed in the falsification, in bulk, are chalk, pipe clay, plaster of Paris, sand, flour, and starch, all of which bodies can readily be detected by the chemist. When taken into the stomach by children, these lozenges, sugar plums, &c., often occasion severe constipation, and other diseases, which, doubtless, every year, is the cause of carrying great numbers to the grave. But, by far the most dangerous adulteration in this species of manufacture is the coloring matter used to impart the beautiful and brilliant hues the articles generally assume. All the substances employed for this purpose, which are derived from the mineral kingdom, are poisonous and attended with danger, excepting the oxides of iron, ferruginous lakes, and prussian blue. Of vegetable substances, gamboge should be severely proscribed, in consequence of being a drastic cathartic, which, even in minute doses, occasions violent intestinal irritation. Litmus, too, should be equally prohibited, both on account of its being occasionally incorporated with putrefied urine, and being adulterated with common arsenic and the peroxide of mercury.

The lozenges, comfits, &c., which are of a bright *orange* tinge, are sometimes colored with chromate of lead and minium, or red lead; brilliant *yellows* with gamboge, Naples yellow, and chromate of lead; *greens* with prussian blue and vegetable yellow lake of alumina, mixed with sulphate of lime, as well as with Scheele's green, or the arsenate of copper; the *blues* are chiefly colored with prussian blue, and consequently contain no deleterious compound; the *reds* are tinctured with vegetable lakes of alumina, and chromate of lead with red vegetable lake and red lead. The papers, also, used for wrapping up sugar confectionary, are colored with similar poisonous materials as the comfits themselves, and children will often suck or eat these papers, from which it is evident that the most fatal consequences are liable to occur.

As the most diversified colors can be obtained by the confectioners, from totally harmless materials, it is surprising that they pursue a practice so pernicious to public health. Thus, from the lakes of cochineal and carmine, they can prepare all the reds; the lakes of logwood will afford them a violet; the lakes of dyer's broom, &c., will give the yellow; the lake of Persian berries, with prussian blue, forms a more beautiful green than any mineral can produce; and finally, by mixing these harmless colors, all the intermediate tints and shades can be obtained.

Pure sugar, or candy, taken in moderate quantities, is wholesome and beneficial to health, and may be used without injury to the teeth; but whenever nausea is produced, it will be found that it invariably arises, not from the sugar, but from the vile trash mixed up with it, known under the general name of "sweet meats," or "sugar plums." Should any one doubt this latter fact, an analysis of these articles, taken from any confectioner's shop, readily proves it.

SHEARING OR CLIPPING HORSES.—We have seen specimens of this recently in the city, that would quite astonish the uninitiated. A long-haired, shabby-looking beast, after being a few hours under the hands of the shears, comes out with a close, smooth, shining coat, quite to the taste of the admirers of horse flesh. There are some advantages in this practice irrespective of the looks. The horse does not sweat so easily, and when once wet, he dries more readily, and the tendency to colds is thereby materially lessened.

A GENUINE ALCHEMIST.—The Dey of Algiers, understanding that the Bey of Tunis, who had been dethroned, possessed the art of converting the baser metals into gold, restored him to his throne on condition that he revealed his secret. The Bey sent him, with much pomp and ceremony, a plow!

CUBA AND THE CUBANOS.

We had occasion to notice in our last number, the enterprise and liberality of the government of Cuba. We are now happy to add the following testimonial of the high character of the planters of that island, from the intelligent American traveller, Mr. McCulloch, of Philadelphia, who has recently visited them. We are so intimately connected with them in commerce, that our interests are in many respects identical. We cannot fail, therefore, to feel a deep interest in all that concerns this intelligent and enterprising neighbor.

"The planters of Cuba, whether we judge them by the progress made in improvements, by the skill exercised in the operations of manufactures, by the judicious management of their estates, or by the information and intelligence they display, must certainly be considered the equals of our own fellow citizens, and that they do not realize far greater profits from their industry, is to be attributed, not to inferiority, but to the tyranny of Spain.

"I should be unjust to the Creole population of Cuba, to the humble montero as well as to the wealthy planter, if I were to say of them that they are our inferiors. They are no mongrel race, like the population of Mexico. The purest blood of ancient Spain flows unmingled in their veins. The ashes of Columbus repose in the cathedral of Havana, and the people of the island are worthy descendants of his followers. I have observed them carefully, and I know them well, for I have been under their roofs and among them long enough to become acquainted with them. They inherit and by nature are endowed with the noblest faculties. In his hut made of the wood, and thatched with the leaves of the royal palm (palma real), the poorest montero welcomes and presents you to his family with the manners of a polished gentleman, unconsciously displaying those domestic and social virtues which dignify and exalt human nature, however humble the lot of their possessor. Between the educated and refined society of Cuba, and that of our southern states, an American will perceive no difference but that they speak another language. And on a plantation in Cuba, if he be familiar with southern life in our own country, he will find himself perfectly at home. Indeed, were he not surrounded by tropical plants and scenery, and constantly listening to the sounds of a foreign tongue, he might readily imagine himself to be still in the land of his birth."

Composition of Bones.—Nearly two thirds of the weight of recent bones is earthy matter, principally carbonate and phosphate of lime; the other third consists of a peculiar animal substance called *gelatine*, some oil or fat, and a variable quantity of moisture. For all practical purposes, in manuring land, the phosphate of lime may be taken, on an average of 50 per cent., or one half of the fresh bones.

Guano—in What its Value Consists.—Guano is chiefly valuable for the ammonia and phosphate of lime it contains. That from Peru certainly owes its greatest efficacy to its large proportion of ammoniacal salts; but some other kinds, as that from Saldanha Bay, must be considered, in the main, only for its phosphoric acid.

REARING LAMBS.

Like all other young stock, lambs ought to be kept steadily growing, without getting too fat. Where a healthy, strong, and young ewe has a good range of pasture, the lamb may acquire so much fat as seriously to interfere with its thrift, when taken away and put upon its winter's food. Experienced flock masters say they have frequently lost lambs from this cause, and that when a ewe has twins, and the milk is divided between the offspring, this loss never occurs. This is an important fact for the practical man.

It is well to have the lambs accustomed to dry forage before they are put up for the winter. If good, sweet hay, dry clover, or oats in the sheaf, or threshed, be thrown out to a few old sheep, surrounded by all the lambs, while the latter are in fine condition, brisk and lively, they will at once begin to nibble at the dry food, and soon will be entirely familiar with and enjoy it. If left, however, till weaned, and they have become pinched by the snows and frosts of approaching winter, and the scarcity and insipidity of autumnal forage, their stomachs are in a weak or diseased condition, they have no appetite for their new dry food, they stay away from the racks, and daily become weaker and more indisposed, and soon have become too far reduced to recover, or if they survive, it is with a constitution permanently impaired.

WIRE FENCES.

I am glad to see the attention of farmers turned to this subject, as I believe at no distant day wire fence must become the leading kind generally over the Union. It is true that there is a difficulty in fencing against hogs, but even that can be overcome without much trouble as is hereafter suggested.

I have never yet had any made, but intend to make a sample next spring. I have given, the subject, however, a good deal of thought, and made inquiries and figures thereupon. From some small experiments I have made, there can be no doubt but my figures are mainly correct. I shall use No. 11 wire, cedar posts, as they are the most durable, and shall set them six rods apart, making the fence five strands high. The post being set, I should begin by boring an inch hole through each, at eighteen inches from the ground; then another hole eight inches from that, the next ten inches; then twelve inches; then fourteen inches, making the fence five feet, two inches high. After the wires have been drawn through and strained tight, drive plugs into the holes at each side to hold them in their places. Between each post, and one rod apart, drive down a stake, saw into it opposite each wire, perhaps an inch, lay in the wire, and drive in a shingle nail to keep it in its place. It would be less trouble to drive a small spike into the post and wind the wire round it by one turn, rather than to bore the holes; though the expense would even be more.

The wire ought to be prepared in the same manner that it is for bridges, boiled in linseed oil for a quarter of an hour, and then dried, and the same process repeated three times. This anneals and at the same time coats the wire, and saves painting it. If, however, there be but a small quantity to pu

up, it would be better to heat the wire, and afterwards paint it. Coal tar would also be an excellent substance for that purpose. Now for the expense.

A strand of No. 11 wire, 80 rods long, weighs 25 lbs.	
80 rods of fence would weigh 125 lbs. at 7 cents,	$10.75
14 red-cedar posts, 25 cents each,	3.50
85 stakes, 1 cent each,	0.85
Preparing wire and painting,	1.00
Setting posts and stakes,	0.50
Putting up fence, including spikes, or boring posts,	1.00
Contingences,	1.00
Outside cost for 80 rods of wire fence,	$17.60

This would be 22 cents per rod; but the actual cost to the farmer would not be 20 cents.

On most farms, where there is plenty of timber for posts, it would not cost but about 16 cents per rod. But allowing for all contingencies, and that it costs 25 cents per rod, it is then by far the cheapest fence that can be built.

In order to fence against hogs, I would drive down short posts and put on boards about two feet, and put the wires above, but nearer together. I think that no hog that ought to go at large would ever get through. For all other kinds of stock, it would be impenetrable. A neighbor of mine, who is compelled to fence against a whole village of street cows, put but two strands across a stream, where his fence was washed away, and it has proved a perfect protection. I have seen the cows walk up to it, but have never yet known one to attempt to get through, although the temptation between a fresh pasture and the dry streets was very great, I have no doubt. T. C. Peters.

Darien, N. Y., November, 1848.

REVIEW OF THE SEPTEMBER NUMBER OF THE AGRICULTURIST.

Potash Necessary as an Ingredient in the Food of Plants, is the title of the first article in this number, from the reading of which the reflection naturally arises, of how much of this indispensible ingredient is wasted in many parts of our land—in the waste of household ashes, clearing of forests, and the neglect of gathering and burning weeds, leaves, &c. But, above all things, is the want of knowledge of the value of such ingredients, or that potash is at all required to enable the farmer to produce a good crop. How small a portion of the cultivators of the western prairies are there, who think of the potash stored up in the soil upon which an annual crop of grass has been burnt for a thousand years! Do one in ten of the advocates of burning stubble, ever think that it is the potash given immediately to the surface, that tends to enrich it more than it would be by the slow decay of the whole mass of straw and weeds, when plowed in, or what is much more common, left to rot, or dry up and blow away, or be washed off by the rains. This matter of manuring land with potash, is one that demands more attention.

Social Meeting of Farmers and Gardeners.—This is one of the kind of meetings that should be much more common. All trades and professions have their meetings to devise ways and means to promote their business. But a meeting of farmers to impart knowledge to each other about their own business, is almost an unknown thing. Farmers are certainly too unsocial for their own good. The organization of farmers' clubs and social meetings, always tend to improve every neighborhood in which they are established. I wish their number might be increased a thousand fold.

Adulteration of Food, No. 3.—I have heretofore given my views upon this subject. If the citizens of New York use adulterated milk, in these latter days, they deserve but little pity. The railroad to Orange county alone is sufficient to supply the city with pure, sweet milk, without any assistance from *Pump, Chalk & Co.* If the consumer will only determine that he will have good milk, I have faith to believe he will find honest dealers enough to supply him. It is well known to dairymen that one cent and a half a quart for milk, will pay more profit than the average price of butter and cheese. But there seems to be a class in the community so thoughtless, or careless, that they are willing to be fed under the name of milk, with the refuse of the filthy still tubs, after it has been run through the intestines of a poor feverish cow, with just life enough left in her to enable nature to separate the coloring matter from her food, and make that wish-a-washy stuff that is drawn from her teats, and which bears no other resemblance to fluid from the same source in a good grass-fed, country-bred, healthy cow, than is found in the fact that it has a whitish, milky look. There is another source of adulteration of milk, that the writer of that article has neglected to speak of. It is to be found in the unaccountable negligence of whole communities, in breeding calves for milking qualities.

American Horses in France.—I am delighted to learn that "there is a tide in the affairs of" horses, as well as men; and that it may yet turn and flow towards Europe, with such a flow as will completely overwhelm that prejudice against everything American, until the people of that country, as well as this, will learn that we can grow horses upon our cheap lands, for less money, and of as good quality as can be done in the "auld countrie." The truth is that the importation of stock has been carried to a ridiculous extreme; and it is time that the tide should turn.

Marking Sheep.—Until something of this kind is adopted, I wish to impress it upon every one who keeps a flock, if not more than half a dozen, that Venitian red is the best thing that I ever saw used to paint-mark sheep. It is, as most all know, a cheap red paint, only a few cents a pound, and one pound will mark a thousand. Take up a pinch of the dry powder, and draw the thumb and finger through the wool upon the particular spot you would mark, loosing the powder at the same time, and it will combine with the oil of the wool, and make a bright-red mark that rains will never wash out, and which will endure from one shearing to another, but does not injure the wool. It is readily cleansed out by the manufacturer.

A Mink Trap.—The one described, for ought I know, may be a very good one, and probably the fish bait on the dried muskrat flesh, a very good

bait, but the boys need not trouble themselves to catch and dry a muskrat before they catch a mink. Muskrats are the natural food of minks, and therefore, old hunters take advantage of the mink's love of musk, and carry a little vial of liquid, strongly scented with it, and a few drops of that upon a piece of flesh attracts them to the trap; which is usually a small steel spring one.

The Pea Fowl.—I do hope that no farmer will be tempted by this very plausible article, to bring a stock of these gay birds upon his farm. Not that I object to seeing or hearing them; but because it will be the means of preventing him from having such a garden of flowers and vegetables, as ought to surround every farm house; and because that peacocks certainly are a nuisance among other poultry.

Liebig's Theory of the Motion of Juices.—I only notice this article to recall the attention of readers to the sentence in which he speaks of the blistering of the skin at great elevations, and accounts for it. Conversing the other day with a man direct from Oregon, he spoke of the fact of emigrants' faces blistering while crossing the Rocky Mountains, a circumstance that I recollect to have read about before, as well as the bleeding of the gums. Instead of attributing this to the right cause, this traveller says that it is the universal opinion that it is owing to the air being charged with saline particles.

Canadian Method of Hunting Wild Bees.—Why is this called the "Canadian method?" It is the American method. But you have not told the whole. At certain seasons of the year, the hunter goes into the woods and burns honeycomb, which will attract bees from a considerable distance. These he feeds with honey, and then watches the course they take for home, which being a "bee line," is easily followed, and the tree, when found, as remarked, seldom fails to reward the hunter for his trouble. I have known upwards of a hundred pounds taken from a single tree. And yet, I never knew a professed bee hunter that provided half the comforts for his family that he might have done by an ordinary degree of industry. Bees are often found in winter when there is snow upon the ground, by going carefully through the woods and looking at the root of every proper looking tree for a "bee sign," which is seen in the form of the yellow excrement and dead bees on the snow after a warm sunny day.

Letters from Abroad, No. 4.—These letters continue to be exceedingly interesting. And if the wines can be kept strictly confined to their proper sphere, to be used for medical purposes, and never as a beverage, I have no objection to their manufacture in this country. But being a somewhat strict son of Temperance, I am opposed to any other use of them; and as an American citizen, I am opposed to their importation, because they can be manufactured upon our own soil by paying a little attention to the cultivation of the grape.

The Best American Bee Flowers.—"Buckwheat and white clover; the former produces the best honey but is less saleable from its dark color." This is an old story; so old, in fact, that it is almost an act of irreverence to dispute it; yet, as I never hesitate to combat an error on account of its age, I shall attack this. In the first place, then, buckwheat is not the best bee feed, either for quantity or quality. If it makes the best, or even good honey, I am greatly mistaken. Indian corn, while in bloom, is better, but it affords but little wax. The honey is rather thin, but white, and the comb very tender. The only thing in favor of buckwheat is, that it affords flowers and bee feed a long time, and helps to produce a large quantity of honey; but I do not like the flavor. The willow affords the earliest spring feed for bees; that is, it enables them to provide food for the young brood.

Unnatural and Injurious Overfeeding of Breeding Animals.—It is one of the "singular coincidences" of this life that this English writer should have written this article almost in my own language. It is a disgraceful fact, that nine tenths of all the premiums awarded in this country, are awarded to great masses of fat, without much regard to any other quality. Until there is a different and more just system adopted, I shall look upon all premiums for cattle, of little or no benefit towards improving the breed of cows, in their milking qualities.

The Cotton Crop.—Dr. Philips gives an amusing "exposé" of what I have long looked upon as a great humbug. The idea that a commission merchant in New Orleans, should issue his "circular" in advance of all possibility of knowing what the cotton crop will be, to tell the world what they are to depend upon, is indeed laughable. Will the doctor give us more of the particulars about his hogs dying from eating the cow pea? Are you fully satisfied upon that point? I have known so many hogs fed upon these, without injury, that it is difficult to reconcile the fact with former experience. I think that if you are able to "kill 800 pounds of pork per hand" this year, that there will be no danger of your negroes starving. By the by, Doctor, did you ever see a starved negro in your county? We often hear of them up north, but I never saw one at the south. I commend you, Doctor, to stick to the word "milk" for *milch*. I assure you that I will always be with you there.

Rough Notes by the Way, No. 1.—This is an article by the father of the editors of the Agriculturist, who writes entirely too seldom; because he is just such a character of a writer, as friend Reeve is of a nurseryman. When he writes, he intends to mean what he writes. I like this "No. 1" of the "Rough Notes." The statistics of Salem county ought to put some other counties to the blush. Is it possible that this county raises a surplus of 600,000 pounds of pork, and 4,450 calves? And only think of every man, woman, and child in the county selling a market basket! I am also surprised at the value of the furs, $7,500. What are they? [The fur of foxes, bears, wild cats, minks, muskrats, &c., &c.] Again, a thousand dollars, worth of oil of sassafras; and fifty tons of sumac, at $35 a ton! Is that the common kind of sumac, and is it cultivated, or does it grow wild? [The common kind, and it grows wild.] This is an interesting feature of an industrious population. I should like to visit them. [Then why not do it? It is only a day's journey, you know, from your own comfortable domicil.]

Cooked Food for Fattening Cattle.—I am well satisfied that cooking potatoes for fattening cattle

will not pay cost. On the contrary, for hogs, they are of but little value when fed raw. I should like to see the experiment carefully tried, to ascertain the relative value between potatoes and Indian corn, for fattening both cattle and swine.

Rural Pastimes by Social Labor, No. 4.—The reading of this article has carried me back to the days of my childhood, to the joyful husking frolics of New England. It grieves me to think that these old-fashioned rural pastimes are being superseded by a *refined* state of society, that certainly gives no increase to the happiness of the rural population. Rural population!!! did I say? Why, the phrase is almost obsolete. Excess of refinement in these latter days, forbids that a bevy of country girls should engage in a most gleesome party of huskers, and spend an evening out in the orchard, or barn, with old men and boys, red ears and speckled ones, jokes, songs, and stories, all to wind up with a wholesome, hearty supper, and, perhaps, a most exhilerating dance. But perhaps the most jovial and happy husking frolics in the world, as your correspondent alludes to, are among the negroes of the southern states. These, and the Christmas merry makings, are bright spots in a darkie's life. And here, with minds full of reminiscences of the pleasures of rural life, let us be impressed, while buoyed up with the pleasing reflection that we are administering to the stock of information or benefit of that class of our fellow laborers, whom we desire to see elevated above the mere drudging day laborer, or cringing serf of some exacting landlord. And I am well assured that such a class of population can never exist in this country, if our rural laborers will continue in the well-begun practice of supporting and reading works like the Agriculturist, and numerous others, that have been published within a few years; for they tend to enlighten the mind so that it will be the surest guarantee against the evils of "land monopoly," and give us an ever increasing population of cultivators of a soil they are proud to call their own.

REVIEWER.

HINTS ON THE MODE OF ENCLOSING LOTS IN RURAL CEMETERIES.

FOR an evergreen hedge, as an enclosure to a burial lot, in a cemetery, I think, all things considered, the arbor vitæ (*Thuja occidentalis*), is the most appropriate. Planted, and treated as a hedge, that is, shearing and clipping it annually (and no plant will better bear the shears), it may be kept down to the height of three or four feet. Or, if it is left untrimmed, it will form a dense screen, or enclosure, from ten to fifteen feet in height. It would always be a harmonious and agreeable mode of marking the limits of proprietorship in any of our cemeteries, and would be much more in accordance with the feeling of seclusion, which one naturally associates with a resting place of the dead.

The evergreen *Variegated-leaved Euronymus* would, also, make an excellent low hedge for an enclosure of this kind, perfectly hardy, and very pretty withal. So would the tree box (*Buxus sempervirens arborescens*), but more dense than the euronymus, and it would bear equally well the shears.

The *Mahonia equifolia* is a desirable shrub for an evergreen hedge, being hardy and growing to a height of three or four feet, displaying its beautiful yellow flowers, which form a pleasing contrast with its rich, deep-green leaves.

The *Double-leaved Altheas*, intermingled with each other, would likewise answer an admirable purpose, and perhaps stands unequalled by no deciduous-leaved plant, unless it be the purging buckthorn (*Rhamnus catharticus*). The latter makes a most perfect hedge, if properly trimmed, by the time it acquires a height of three or four feet.

Among the trees of a larger growth, suitable for ornamenting burial lots, the hemlock spruce (*Abies canadensis*), a native of our forests, is most beautiful in its character, and is much to be admired for the deep color of its finely-cut and glossy leaves, which render it much more graceful in its appearance than most other evergreens.

The *Deodar Cedar*, however, without exception, is the most magnificent evergreen that has ever been introduced. It is a native of the Himalayan Mountains, in Asia, and has thus far proved perfectly hardy, as has been fairly tested in several nurseries at Flushing, and elsewhere, for three or four winters past. Its foliage, in appearance, in the early part of summer, is very much like that of the larch; and its beautiful weeping habit excites the admiration of all who become familiar with it.

Another beautiful ornament for a cemetery lot, is the *Swedish Juniper*, an evergreen attaining a height of ten or twelve feet, and much more rapid in its growth, and far more graceful than the Irish yew. Its feathery light foliage and pendant branches place it far above any other evergreen of an equal-sized stem.

The common yew (*Taxus baccata*), although long associated with burial grounds, or churchyards, in Europe, and attains an advanced age and a large size, is less hardy than the Irish, and is not adapted to the climate of the northern parts of the United States. The association, perhaps, might be kept up by the American trailing yew (*Taxus canadensis*), which is perfectly hardy and will grow on almost every variety of soil.

There are many other desirable varieties of trees and shrubs, which would be appropriate for the object above, but the present will suffice.

SEMPERVIRENS.

Flushing, L. I., November 12th, 1848.

ANOTHER FACT IN BOOK FARMING.—A correspondent writes us from Winchester, Virginia, that he has been a subscriber to our journal for five or six years, and that he would like to see it more extensively circulated in that place. He says that he has shown his neighbors, the last season, how to raise 83 bushels of shelled corn to the acre without the application of any manure, whereas 35 bushels in his "diggins," is considered a good yield. He attributes his success to the knowledge he obtained from the American Agriculturist.

PHOSPHORIC ACID ESSENTIAL TO THE GROWTH OF ALL NUTRITIVE PLANTS.—In all the plants, or parts of plants, which are of any great nutritive value, phosphate of lime, or some other compound of phosphoric acid, is always to be found in a considerable quantity, whilst the proportion in which it occurs for the same plant, is so uniform as to preclude all question that it is essential to their very existence.

AGRICULTURAL TOUR SOUTH AND WEST. NO. 1.

To the Readers of the American Agriculturist:—I am again out upon a tour of observation, directing my steps towards a clime more congenial to my health, than is that of my northern residence. And I propose to note down such things by the way, as will be most likely to be interesting and useful to you.

Being charged by friend Allen to "write short, practical articles," I shall be precluded from giving as much of the descriptive character of the land I shall travel over, as I would like to, and as I believe would be pleasing to you. I shall, therefore, make an abrupt commencement with a little account of my visit at Terre Haute—an old French name that means *high land*. It is situated on a most beautiful prairie, some five miles wide and fifteen long, that lies high above all floods, along the bank of the Wabash, which is only navigable in high water; and the place being 120 miles from the Ohio, it suffers the evil of being an inland town. The canal to Lake Erie will, however, open in the spring, and in a few years more, to the Ohio. The rapids of the Wabash are also being improved, and a railroad to Indianapolis, and thence to Bellfontaine, in Ohio, is now in progress.

It is to be hoped when these channels are opened so as to carry off the surplus produce, that the great staple here, Indian corn, will be worth more than twelve to fifteen cents per bushel, the present price; and that the farmers will not wear quite so much the appearance of "hog and hominy," as many of them now do. Yet there are some here who take a pride in cultivating and beautifying the earth. Among these I must mention three of nature's noblemen, James Farrington, S. B. Gookins, and Wm. F. Krumbhaar.

Mr. F. has a most beautiful place just on the south edge of the town, and one of the best houses I am acquainted with. Best, because so well built, and so exceedingly neat, and plainly finished. I need only say that there is a wife and daughter within, who are "all right," to satisfy my readers that it is the dwelling place of such comfort and happiness as I wish every cultivator of the American soil could enjoy.

Mr. F. and his partners have one of the most convenient pork-slaughtering and packing establishments I have ever visited. If I could take up the room necessary to describe it, I doubt not it would be interesting. The head, feet, bones, and entrails are all strained to save every ounce of fat. The offal of the strainer and blood, although such good manure, is never saved. The hair, during the first year or two has been sold to go east, for about seven cents a hog. One curious circumstance occurred last spring in connection with this. The hair had been spread out to bleach on a piece of common grass. After its removal, in the spring, the grass started very fresh, and cows fed upon it, and took up so much of the scattered hair, that several were killed by the hair balls formed in the stomach. Some were found to have two or three dozen balls in a stomach, and some were very large. It became necessary for the neighbors to have the ground plowed to save the lives of cattle running upon the common. It would have had a more happy result, if it had been the cause of forever preventing cattle from being free commoners of this beautiful town.

Mr. F.'s establishment is capable of killing and packing about 500 head of hogs a day; and there are four others in this place, besides two steam trying lard houses. Pork is now worth here about two and a half cents per lb. The great mass of hogs appear to belong to that breed which must "root, hog, or die," and are well able to do it. Even those that are fed corn, have it well mixed with mud—the fatting season, being the rainy season.

The best lot of hogs I saw about Terre Haute, I found on the farm of Mr. Krumbhaar. They were a mixture of Berkshire, Byfield, and Grazier varieties. And as marking a degree of civilization, he did not throw the corn in the mud. On my visit to Mr. F., I was accompanied by Judge Law, of Vincennes, one of the pioneers of this valley. Had I room to give his reminiscences, as related during the two days spent with him, it would make an interesting paper.

We found on Mr. K.'s centre table, in the parlor, one of the most fitting displays of such a table, in a country gentleman's house. This was twenty-eight varieties of apples. Mr. K. feels, as well he may, quite proud of his success in growing fine apples. In fact, though, this whole region is full of apples. Mr. Farrington has nearly as great a variety, besides a good assortment of pears and peaches, and other fruits.

At Mr. K.'s I ate chestnuts grown from the seed in about ten years. Chestnuts must never be allowed to get dry, to insure their growth.

Mr. K. and Mr. F. have a fine start of evergreens. They were taken up in the spring with but little dirt to the roots, and boated down the river sixty or seventy miles; and by such careless handling, more than half died. The soil around here is a sandy loam. The timber mostly oak, except in the river bottom. Mr. K. has some very good Durham cows, and although his wife was from a Louisiana plantation, she has become an excellent butter maker

Mr. Gookins, although a lawyer, has a fine taste for cultivation. He is just beginning a place a mile south of town, where I found some of the handsomest three-year-old apple trees, that I ever saw. Although the ground is a very soft loam, he told me that he had large holes dug, and then fine, rotten manure mixed with the soil, and the hole half filled; and then with his own hands he carefully straightened all the roots of the young trees, and pressed the dirt around them, so that they seemed to feel no check in growth in their removal from the nursery. His prospect for a crop of apples next year, is now good. So much for care in setting out trees.

Mr. G. has tried planting corn and potatoes in alternate rows, and thinks it an excellent plan.

One of the most favorite apples hereabouts, is the belle fleur. They grow large, and of excellent flavor. They are unlike those of the east in one particular, as I never saw one here with loose, or rattling seeds. The gloria mundi has been grown here of twenty-six ounces weight. Apples throughout all the west, are most abundant this year.

Hundreds, aye, thousands of bushels will lie and rot unheeded, here in the Wabash Valley. Many hundreds of wagon loads are hauled near two hundred miles to Chicago. If nice, they will sell well, but common ones are no longer worth hauling.

Mr. Gookins told me of an orchard which was set eight years ago, in the ordinary, careless way, that is not now near so good bearing as his.

In 1818, Terre Haute was laid out a few miles from the "frontier post," Fort Harrison. All of northern Indiana, Illinois, and Iowa and Wisconsan, was then a vast, untrodden wilderness. Look at it now. See what a change in thirty years. A region larger, and far richer than some European empires, full of civilized life; and although not one tenth cultivated, talking about furnishing the world with human food.

Nothing is now so much wanted as facilities of transportation. No eastern reader, not even around Buffalo, can form an idea what wretched bad roads the dwellers upon this rich soil have to travel over, such a time as this fall, for instance, has been. It is worth more than produce brings, to haul it fifty miles to market. And every effort to make good roads out of the soil alone, has proved an entire failure. The national road is an example in point. For, after an expenditure of more than $30,000 a mile, the road is now what a decent Yankee grand jury would indict as *impassable*.

There is a new bridge over the Wabash, and a very muddy road west, though not near so bad as the one I came over from Indianapolis. The part of Illinois lying along the national road, between the Wabash and Kaskaskia River, at Vandalia, is, perhaps, the poorest of any part of the state. At any rate, the people and cultivation bear no comparison with the northern counties. Not but what there is sufficient fertility in the soil, although the prairie land is very flat, and apparently wet and cold; but there is no show of "go-ahead-ativeness." There is not a good-looking, well-cultivated farm in the whole hundred miles. And I saw nothing that looked like a good school house. But I did see a great many whiskey shops. I am sorry to write against any country, but this is a region that I would not settle in myself, if in search of a new home. Others may if they like it.

Vandalia, once the capital of the state, now wears the gloomy weeds of the "deserted village." The Kaskaskia, which runs at the foot of the hill on which the town is crumbling to decay, is the only permanent mill stream I have seen since I left the Wabash. Out of this in flood time, go flat boats, 300 miles by water to the Mississippi, and this is the only way of getting off produce that will not bear hauling sixty odd miles to St. Louis.

The country between Vandalia and St. Louis, is far better than that eastward. Yet here is a great want of improvement. In Bond and Madison counties, there are some good orchards, and a few good-looking farms. But the traveller is surprised to see within twenty or thirty miles of St. Louis, vast tracts of rich, rolling, healthy prairie, lying uncultivated, and even unbought of government. Even the far-famed American bottom, opposite St. Louis, is not one half of it in the very rough state of improvement that the other half is.

There is a very great want of water mills in all this part of the state. Page's patent circular saw mills, are getting considerably into use, and are much approved. Most of the grain for family use is ground with horse mills. I saw two windmills, and was told that they did pretty well.

In the interior counties of the state, very little wheat is grown; as the inhabitants mostly use corn, and wheat will hardly pay transportation. If it were not for the fact that farmers who haul produce to market, live in the cheapest manner on the road, their loads would often be insufficient to pay expenses. What would a New-England farmer think of hauling produce 200 miles to market; and during the whole trip sleep in his wagon and eat his cheerless meals by his camp fire, along the roadside? Such is the condition of things in portions of the great west.

Although this is not the case upon the fertile lands opposite St. Louis, yet there are times when to get a load of wheat only a dozen miles along what the inhabitants are pleased to call "the big road," would be such an undertaking as no load of wheat would be sufficient to pay me for. I don't know as the American bottom ever becomes *absolutely impassable;* but if it does not, it is because that no state of roads can prevent western people from passing them. It is probably impossible for any eastern man to conceive anything half so bad.

In my journey across the state of Illinois, I did not see a herd of good cattle, notwithstanding it is such an excellent grazing region. The cattle are all of the scrub breed, and small at that. On the Kaskaskia, the milk sickness prevails. It is a curious fact that beeves affected by this complaint, cannot be driven to market. I saw some upon the road that had given out. Cattle slightly affected often recover. Care should be taken to keep them from salt, as that aggravates and often kills.

It is a common practice to run a beeve, before butchering, to prove it free from this disease, as fatal effects follow from eating beef badly affected with this strange poison, as well as eating milk or butter from cows so affected.

I saw very few sheep along the road, and all of them of the common kind, yet looking remarkably well. There is one difficulty in growing wool, in the great quantity of burrs and "stick tights;" but yet these are not insuperable, and it is wondrous that no wool of any account is grown in this part of the state for exportation. It is an article that will bear hauling.

Corn and hogs, hogs and corn, are the almost universal rotation. And yet in the whole distance (160 miles), I saw but one good lot—that is, of good, improved breeds. I saw droves going to St. Louis, for pork, nearly 100 miles distance, which as a matter of course could only be in good working order, averaging, perhaps, 175 lbs., and some of them showing tushes three or four inches long. Bah! What pork!

In that whole distance, I saw but one threshing machine. How curiously this contrasts with a trip through the northern counties, where a traveller will often see twenty in a single day's ride.

At St. Louis, I had intended to make some acquaintance with those who should feel an interest

in agricultural improvement; but I soon found that I had fallen upon the wrong time.

I found the news of the presidential election that had taken place the day before, in New York, and other eastern states, a thousand miles away, here in every man's mouth, and so engrossing all attention, that it would be an idle waste of time to offer to talk upon any other subject. Ah, me! How can the minds of a people be brought to think upon the importance of judicious cultivation of the earth, who never think or read of any other subject than party politics? The manufacturer of plows, to them is a far less important person than the manufacturer of political opinion.

Speaking of plows. I saw at St. Louis, one of those great, unwieldy, iron, Scotch plows, just imported for the use of some prairie farmer, at a cost probably sufficient to have kept him in a neat, light article, suited to his wants, a life time; while this, after proving its total unfitness for this soil, will go, as many others have done, to the smith's shop for old iron. * * * * * * An unwelcome shake of ague, here shakes off the balance of this article.

SOLON ROBINSON.

On the Mississippi River, Nov. 14th, 1848.

OUR readers will see by the above. that their old friend and bright examplar, in the great work of agricultural improvement, has at length taken up his march for the south, with the intention of passing the present winter there. He promises monthly reports of his seeings and doings in that luxuriant and hospitable region, which we have no doubt will be found highly entertaining and instructive to the readers of the Agriculturist. Mr. Robinson will act as agent in his travels in soliciting subscriptions for our periodical, as well as obtaining orders for the agricultural warehouse of A. B. Allen & Co., of New York, and Stephen Franklin, of New Orleans. We beg to commend him and his objects to our southern friends, and hope that his travels among them will prove mutually serviceable and agreeable. Any one wishing to address Mr. Robinson previous to the first of next March, can do so, to the care of Mr. Stephen Franklin, cor. of Magazine and Poydras sts., New Orleans, who will promptly forward all communications to him.

PLOWING WITH ELEPHANTS IN INDIA.

HUNDREDS of active young elephants can be procured at the straits of Malacca at from $50 to $100 each; admirably suited for work of various kinds, but more especially for plowing. One of these animals will closely plow a full acre of land in a day with the greatest ease to himself; and only requires to be attended by his keeper in addition to the plowman.

Any one visiting Singapore may see a small elephant, named "Rajah," working daily on the estate of J. Balestier, Esq., American Consul; and, although the animal is only five years and a half old, he will plow his acre of land a day with ease. One man holds the plow, and another (the keeper), walks beside the animal and directs him in his duty. The docile little creature obeys every word that is said to him, and will plow all day between the cane rows without plucking a single cane.—*Wray.*

VENTILATE YOUR STABLES.

AND we mean by this, not only where horses and cattle, but where sheep, pigs, and poultry are confined. This is best done by placing a ventilator at the top of the building to carry off the impure air. If this cannot be done, then let in fresh air from the top of a door or window, or take off an upper board. Animals are much less likely to take cold or suffer when the fresh air comes in from the top of the place where they are kept.

Recollect that pure air is composed of 79 parts of nitrogen, mixed with 21 parts of oxygen, and an indefinitely small quantity of carbonic acid; that this air is constantly losing its oxygen in the process of breathing, and carbonic acid is thrown out in its place. An undue quantity of carbonic acid in the atmosphere displaces a proportionate quantity of oxygen, and thereby diminishes the healthful properties of the air. This disproportion, if carried to excess, will destroy its life-sustaining principles, and produce death, as effectually as in burning charcoal in a close room. Hence, the vital necessity of purifying the air by constant ventilation.

AGRICULTURAL CAPABILITIES OF FLORIDA.

THIS state differs in many respects, from any within the American Union. Situated at the extreme southern point of our national domain, and surrounded on three sides by the Atlantic and the salt waters of the gulf, it enjoys a climate peculiar to itself. Here several of the tropical fruits, the orange, the olive, the sugar cane, and the vine, flourish in unstinted prodigality. Melons, the sweet potatoe, the yam, and arrow root luxuriate in this fruitful soil and genial clime throughout a large portion of the year. Here, too, the sugar cane attains a maturity and richness no where equalled in the United States.

There is a body of rich, alluvial land lying on this and the contiguous waters, a part of which, at least, is underlaid with marl, that produces the cane in great luxuriance and full maturity. It here tassels and flowers, and ripens almost to the top, and is scarcely ever touched by frost. The planter may here busy himself with other matters, till his crop is fully ripe, before commencing to cut and grind; and when ready for the mill, he may jog along leisurely, relying with almost entire security, that frost will not curtail him of half, a fourth, or any part of his crop. This is a great and decided advantage, which planters here enjoy over their neighbors of Louisiana; and will enable them, in a measure, to make a comparatively secure business here, of what is not unfrequently a very hazardous one there. More than three hogsheads per acre, have been made some seasons, where one had not been saved on the Mississippi. The cane starts earlier in the season, than elsewhere, grows more rapidly and uniform, and is seldom checked by frost, or severe weather. These advantages, and the further ones, of prolonged growth and security against loss by freezing, give an important, indeed, a pre-eminent advantage to the comparatively limited sugar region of Florida. The cultivation of this crop has but recently commenced, but its success already, will soon secure the full improvement of so much of the adjoining territory, as is suited to it.

Besides the crops hitherto receiving attention, there are many which might be introduced with decided advantage. Among these may be named the indigo, the tea plant, and the Má, or Chinese hemp.

I find here many among the planters possessing the right kind of spirit and character, to insure the fullest success in whatever they may undertake. They are men, equally ready for planting a cane, or cotton field, a catamount hunt, administering a bolus, or dissecting knife to a patient, take up the forensic cudgels at the bar, or draw a crowd of willing listeners at a barbacue, or stump speech, where a political adversary is to be flayed. You must know, about one half the leading characters of the south are M. D.'s, and the other half L. D.'s —not lazy dogs, but driving lawyers, most of whom hold some *domestic* military rank, ranging from Major to General. What they have ever found to command, in this land of extremes, in the way of rank and file, it is impossible to discover, where a small part of the population is somebody, and all the remainder nobody. Such is the plethora of military dignities here, that at a large convivial meeting, where the last orator in closing, called on *the General* for a toast, every mother's son of the audience, rose at once on his feet to respond to the summons in right of his title. But maugre the stern character of their military cognomens, they are as mild and placable as a May morning, and provided you come to them in the gentle garb of peace, you are sure of good cheer, and a hearty welcome to all the sweet charities of southern hospitality.

Mr. Westcott, the present senator from Florida, has recently brought together the leading projects and means for draining the swamps of that peninsula. Millions of acres that are now covered with water throughout the year, the Everglades of Florida, and the adjoining swamps, are easily susceptible of drainage, and capable of contributing their unsurpassed fertility to the production of numerous tropical, and other desirable crops and fruits. These now lie in a basin, only separated from the ocean waters (which are sufficiently below their level to insure a thorough drainage), by a narrow rim of earth and limestone. Cut this at proper intervals, with sufficiently wide channels, and another large territory would be added to our Union. Fish, alligators, turtles, terrapins, and bull frogs enough might be caught in the escape of the waters, to supply "swate Ireland" against a five years' famine, to say nothing of a part of the adjoining coast of France. If we have no more *destiny*, nor *civilizations* to accomplish soon, in the way of teaching Mexico or the Camanches propriety and Christianity, at the *point of the bayonet*, it is to be hoped some of our large revenue may be devoted to this object. PATAPSCO.

TO DESTROY ANT HILLS.—Cut them up entirely, both above and below ground, and haul them into a heap to form a compost by mixing them with unslacked lime, which may again be returned to the pasture or field in the form of manure.

A BRIGHT plowshare is the cheapest commodity ever used by a farmer.—*Cobbett*.

FARMS OF MESSRS. WADSWORTH AND AYRAULT.

I AM induced to make a few remarks on a recent visit to Geneseo and its neighborhood. It certainly is a very beautiful country, and deserves all that has been said in its favor. I was much gratified with a ride round the extensive farm of Mr. James Wadsworth, containing about three thousand acres in one body, who pointed out to me the quality of land in each lot. His lower pasture reminded me of the Aylesbury Flats, in Buckinghamshire, England, considered to be the richest grazing land in the world. The farm of the late Mr. Westcar has grazed an ox to the acre, on an average, all through his career; and he took more prizes at the Smithfield show, than any other grazier. He purchased none but the first quality of Herefords, and obtained higher prices than any other man in England. He gave a public challenge in 1825, at the Smithfield dinner, "that he would go to the next October fair, at Hereford, and purchase one hundred oxen of the Hereford breed, which he would feed and show against all the breeds in England, for one hundred guineas per head, or two thousand guineas," which offer no one dare accept. This was done to show the rich men who then possessed the short horns, that he was ready to support the Herefords with his purse. He then told the company that during his experience as a grazier, he had fed and sold twenty Hereford oxen to the butcher, at an average of one hundred guineas each, and he would defy all the breeders of short-horns to say they had done the like.

Had the *white faces* (Herefords), been distributed about this farm of Mr. Wadsworth, I could have almost fancied myself in the large meadow on Mr. Westcar's farm, at Crestlow. It is my impression that the lower pasture on the river, will graze an ox of the first quality to the acre. I believe the superiority of that grass is derived from constant feeding, while the other is generally mown; but fed out on the land it is grown upon, from a variety of small barns distributed about the lots, and under his moveable sheep sheds. The only loss in these two different modes of culture is, the grass is left to grow to seed, and impoverishes the roots, while in grazing, they strengthen and thicken, mat together, and shelter the surface from the scorching sun; by that means they become richer, as the grass grows older, and finer, and if not so long, will carry more stock than thinner, longer, coarser grass; and cattle eat it with more avidity. I observed the orchard grass on these meadows grows very luxuriantly, and I prefer it to Timothy; it produces good aftermath, or excellent feed for cattle or sheep. These beautiful fields are covered with clumps of black walnuts, spreading their branches round; the butternuts follow their good example, with clusters of nuts displaying their productiveness and beauty. Here and there peep from amid the clusters, the beautiful-shaped sugar maple, with its dark, green foliage, and thick, bushy branches. The promising young oaks, also twined their branches there, and all seemed linked in good fellowship to weather the storms together, and produce shady nooks by the side of the circuitous river, for the flocks and herds to repose in comfort. Some old oaks stand alone of extraordinary dimen-

sions; and although the separation made them look forlorn, their splendor adorned the lovely scenery. The hickory, too, with its luxuriant growth has kept its rank and station, its brilliant green and expanded wide leaves showed plainly there was something beneath the surface to support them, in competition against their original rival standards. There is nothing artificial, save one small clump of locusts; while these, in other soils would have dwindled, or have been bored to death, still live and flourish luxuriantly. There is no appearance of aristocracy amongst them, although their verdure and foliage varies in color and richness, their originality keeps each family on equality. Their strength of body gives each an attractive appearance, and their whole attire is gay, commanding, and beautifully picturesque. There nature triumphs in all its glory; neither skill, science, nor fashion's pride, could paint a more pleasing picture.

A view of this magnificent scenery and the surrounding hills, could be taken from the beautiful lawn in front of Miss Wadsworth's mansion, commanding a very extensive landscape. It cannot be surpassed. It is equal and very similar to that of Bushey Park, and its neighborhood, from Richmond Terrace, near London, and it is there supposed that none can equal it.

The view from Mr. W.'s is not so extensive. Although more confined, it is very beautiful. Rustic bridges and winding paths through the wilderness near the mansion, are quite rural and romantic; sufficiently so as to induce all wealthy citizens to follow his laudable example, if they knew what constituted true happiness. The upland of Mr. W.'s farm is not so productive as the flats, still it is an excellent soil, and the course he pursues, keeping a large number of sheep, feeding two years and plowing two, keeps the land in a good state of cultivation.

Farm of Mr. Ayrault.—I was very much pleased while viewing two small farms belonging to Mr. Allen Ayrault. The produce on sixty acres, looked exceedingly promising. The wheat looked like good quality, and good yield; the corn of luxuriant growth, and a crop of broadcast that I should say would cut from seven to eight tons per acre in September. All crops seemed to be uniform, free from weeds and refuse. Every part of manure carefully preserved in mines, until the crops require it. The most rigid neatness was observed about his barnyard, an excellent sign of a good farmer. However, his crops, horses, cattle, sheep, and pigs are in uniformity, of superior quality.

There are two small cottages built by this gentleman, that have a very pretty and neat appearance. They are neither *Gothic*, *Grecian*, nor *Italian*, but entirely constructed according to his own taste; therefore, I shall call them *American*. They are decidedly convenient and economical. The first was built by contract, including all materials and cellar, for $275. When completed, the lines of the lot not being at right angles, and some other circumstances, its appearance was naked. He then, to remedy it, annexed a small woodhouse, and carriage house, at an expense, including everything, of $125 more, making all the buildings as they now appear, to cost only the moderate sum of $400. The other house, at his small farm, is larger, and so constructed as to accommodate and be good tenements for two small families; but this house was not altogether new. The old house is on the same ground, at an elevation of two feet above the present one, with its external design as bad as could be, and the covering all deranged. Two years ago, Mr. A. had the covering and internal work all cleared away, the cellar sunk two feet, the frame turned quite around, and let down thus much. The woodhouse, &c., all done by contract, including materials, at $500. Some extras he added afterwards, made the total expense $535. The workmen assured Mr. A. that they would prefer building entirely new at the same price.

If the owners of land generally would copy such style on as large or small a scale as they choose, instead of such ill-shaped, unsightly, and rude attempts at architecture, what a different appearance the country would have. It is a pity that more rich men do not display some of their own taste for the benefit of their country.

I was very much surprised to see much of the land from Attica to Geneseo exceeding impoverished. I heard from a practical farmer, that his wheat crop, sixty acres, would not average over twelve bushels per acre, and that was about the general run of the farmers' crops. There certainly must be some very bad management with such land.

This farmer had three acres near his house; between sixty and seventy sheep had been foddered there the whole of the winter. It was pastured the following summer, the sod turned over in August and first week in September, then sowed on the stretch furrow. This crop he acknowledged to be full forty bushels per acre. A friend of mine asked him the reason of his failure in the remainder of his crops. He said the wevil, or some other excuse; but this was not the case, it was constant cropping and impoverishing, which is far too prevalent in this country. It is too bad that such excellent wheat land should be so abused. My idea of the management of such soil should be this: Sow clover, mow one year for sheep in winter, graze it with sheep two years, plow it once the latter end of August, sow the wheat the first rain in September; put on your manure in the winter in the frost or snow on the top; you cannot keep it above too much in my opinion (more of this in another article). Sow barley or oats the following spring after the wheat is off, and lay it down for three years; again pursuing the same course as before. By this system your land would not become sterile so quickly. It is impossible to keep land in condition without sheep and cattle.

WM. H. SOTHAM.

Black Rock, August 25th, 1848.

KEEP YOUR STABLES WARM.—In a brief article, p. 20, of this number, we speak of the necessity of proper ventilation of stables. This can be easily done, and yet keep them sufficiently warm for the stock. Due warmth is essential to the growth and fattening of all animals, and the production of wool in sheep. No farmer can expect much of either during the winter months, if he let his stock be out and exposed to the weather, or if his stables are not properly boarded up, the windows set in, and the doors hung. Next to plenty of good food, water, and air, is good shelter.

KEEP YOUR STABLES CLEAN.

As our stock all stand on plank floors, early in the morning we first take up that part of the litter which is not much soiled, with a fork, and place it in the back part of the stalls, to dry during the day. We then clean out the manure, and put it on the dung heap. If litter be plenty, and it is an object to make as much manure as possible, then we should let all the litter go with the manure, and add plenty of fresh every night for the stock to lie on. And while on this subject, we wish to observe that if the litter be straw or coarse hay, it ought to pass through a straw cutter before using it. This makes it much easier to fork the manure in the heap, as it is not then bound together with long straws. After removing the manure, we give the stables a slight sprinkling of plaster of Paris, or charcoal dust. Either of these substances absorb all unpleasant effluvia, sweetens the atmosphere, and in the course of the season, adds considerably to the value of the manure heap.

Many farmers let their stock stand on the ground. If the soil be dry, there is no objection to this. If not cleaned out till spring, the manure should be spread evenly over the surface of the stable, every morning, a coating of plaster or charcoal dust then put upon it, and fresh litter added before night. Each animal will thus make a larger quantity of valuable manure during the season. One great advantage follows this system, and that is, the salts are not exposed to be washed out of the manure by rain, nor volatilized by the sun, as when exposed to the open air in the barnyard and other places.

GUANO.

The use of this valuable fertilizer is rapidly extending throughout the Atlantic coast of the United States. The fertility and remoteness of western lands, will, for a long time, preclude its application among the farmers of that region; but the facility and economy of its transportation to those of the east, and the greater value of their agricultural products, will justify its use wherever there is a deficiency of other manures.

As an evidence of the great value of this fertilizer, we could adduce innumerable examples, but content ourselves with the mention of two.

A farmer in Delaware purchased a lot of worn-out land, and applied a quantity of guano upon it; and from the proceeds of the first crop, he paid for the land, the guano, the seed, and the expense of cultivation. This, surely, was using guano to some advantage.

Henry Nicoll, Esq., of this city, recently gave us the following statement:—The experiment was made on his farm, on Long Island, upon an eight-acre lot of medium quality, sandy loam, that had lain in meadow and pasture for several years. It was plowed up in the spring of 1846, manured in the hill, and planted with corn, which yielded an ordinary crop of, say, thirty bushels shelled grain per acre. The following spring, it was put in oats, without manure, and gave twenty-five or thirty bushels per acre.

After taking off the crop of oats, three acres of an average quality with the remainder of the field, were manured with thirty-eight two-horse loads per acre, of barnyard manure, and the remaining five acres received one ton Peruvian guano, at a total cost of about $50. This was all thoroughly harrowed in, after plowing, and the whole field was then sown with wheat, 15th October, at the rate of 1½ bushels seed per acre.

The season was remarkably dry, which was unfavorable for the development of the fullest effects of the guano. Yet the yield was twenty-one bushels per acre, of measured grain, weighing sixty-two pounds, and of very superior quality.

The other three acres manured with cattle dung, yielded about sixteen bushels per acre of wheat decidedly inferior to the first.

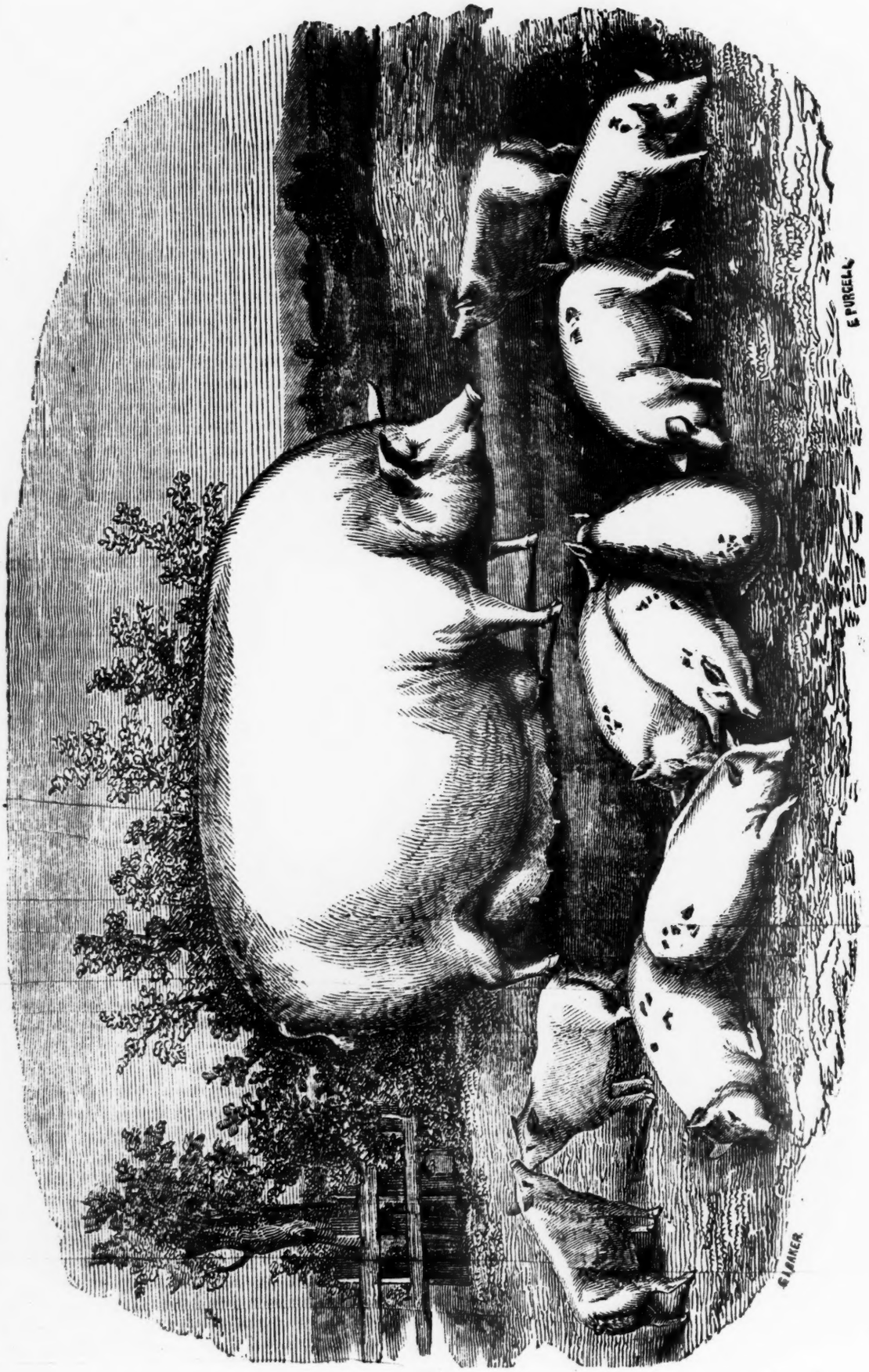
There was another peculiarity about the result, decidedly in favor of the guano. Both portions of the field were seeded with grass and clover in the spring. Not a particle of this was visible on the three acres, while the seed of the five acres manured with guano, had all taken beautifully. This latter was an advantage we had not looked for. We feel bound to add, however, that we should look for a benefit to the grass in after years, on the three-acre field, which would not be seen in the five acres, a greater proportion of the fertile ingredients having already been exhausted by the previous crop.

SEASON FOR FELLING RESINOUS TIMBER.

In cutting timber, of all kinds, advantage should be taken of the season which will favor their duration and strength. Thus oak and most other kinds of non-resiniferous trees, as far as the knowledge of practice extends, are stronger and more durable when felled in early winter at the time the pores contain but little sap. On the contrary, the timber of pine, larch, and other resinous trees, cut in spring or early summer, when the pores are filled with resin, which is, in fact, a sort of embalming, possesses a greater degree of strength and will endure longer than if cut when the resin is absent from the wood, which is more or less the case in autumn or winter

We have no hesitation in stating, that, good heart pine, cut in spring, or early summer, when full of rosin, is fully equal in lasting qualities to any hard-wood timber that can be produced, quite putting in the shade the processes of Payne, Kian, and Burnett, from the efforts of nature being more freely carried out than can possibly be done by the very best exhausting engine and hydraulic presses that have yet been made.

Overflowing Meadows.—The overflowing of meadows, for the purpose of promoting vegetation, was among the pursuits of the ancient cultivators of the then-existing pasture lands. Columella says: "Land that is naturally rich and in good heart does not need water set over it, because the hay produced in a juicy soil, is better than that excited by water; yet, when the poverty of the soil requires it, the land may be overflowed." We find on record, also, the following opinion of Cato: "As much as in your power, make water meadows." Again, from the observations of other authors, it is fair to infer that water meadows were numerous in former ages, from the want of good herbage for their stock.



AN OVER-FED SOW AND PIGS.—FIG. 2.

REMARKS ON THE PRINCIPLES OF BREEDING.

BREEDING, with a view to improvement, may be said to be founded on Nature's established law, that "like begets like." This, however, is only true in part, for there is a constant tendency to change, arising from a variety of causes; such as domestication, living in a different climate, or on a different kind of food. The management to which animals are subject has, also, its influence. While these may be looked upon as the chief causes in operation, that produce this constant change, they are the means, at the same time, in connection with other causes, which are used to effect an improvement.

In order to improve the breed, there are two modes advocated by practical breeders. One is commonly called the "in-and-in system," and the other that of "crossing." The former was practised many years ago, by Mr. Bakewell, of England, which, at least, had the effect of destroying the prejudice that had previously existed against breeding from animals of the same race, or blood. But the system of breeding in-and-in, it has since been ascertained, has a tendency, after a time, to deteriorate the breed; in fact, it is limited, so far as its benefits are concerned, unless the utmost care is observed in the selection and management of the stock, avoiding everything that can possibly tend to hereditary disease. To accomplish this, the breeder must select such animals as his judgment and experience will convince him will be likely to unite in their offspring the qualities sought. From their progeny, again must be selected only those animals which more completely exhibit the requisite qualities, and so on, from generation to generation, until the character desired is fully developed. The importance of continuing this process for a number of successive generations is obvious, from the fact, that peculiar traits of character, often disappear in the first, and reappear again in the second or third generation. A desired character may be found in the parent, and inherited by only a part of the offspring, and the requisite point can only be uniformly developed by a careful selection through several consecutive generations. By this process, it is apparent that this system must be adopted; yet, at the same time, it is desirable to avoid too close alliances. Hence, it is considered better to breed more distant members of the same family together than those that are more nearly related.

In improving the breeds of animals, the chief points to be arrived at, consist in reducing the parts of the least value to the least possible dimensions, which may be regarded as offal, as the head, neck, legs, &c., while the large quarter or ham and deep chest, for fattening, and square, well-set udder, large milk veins, mellow skin, and kind temper for milking qualities, should all be developed to the greatest possible extent. In order to produce these, a strict regard should be paid to pairing with the view of correcting an imperfection in one animal by a corresponding excellence in another. For, the character of the parent is more fully impressed upon the offspring when the former is in the most vigorous period of life. Consequently, neither very young nor very old animals should be selected for the purpose of breeding. All the conditions of soil, situation, climate, treatment, and food should be favorable to the object sought, and particular care should be taken to bring the male to the mind and taste of the female, and for the first year, at least, that the young are well supplied with an abundance of nutritious food, and with comfortable shelter and shade. Furthermore, every female, while pregnant, should not only be well fed, but care should be observed that the food be of a proper kind. Let it be remembered, also, that the growing fœtus has blood, flesh, and bones to form, as well as its mother; and therefore a greater proportion than usual of the constituents which go to make these, must be supplied by the food of the dam; otherwise, the fœtus will suffer, as well as its parent. Again, it should be borne in mind, that, no breeding animal, either male or female, should be made too fat; for the former would often become too heavy and unwieldly by their joints and sinews being, as it were, possessed with little action, or effect, by a load of useless and injurious fat; neither would a female, in a state of pregnancy, be in a natural and safe condition, either as regards herself or her young, when thus unnaturally encumbered. To illustrate more clearly my meaning, let us take, for instance, a breeding sow, as denoted by fig. 2, which has been too highly fed, and it will be obvious that she must have been incommoded with an unnecessary and cumbrous weight during the latter stages of pregnancy; and besides, her offspring, would become contaminated with sickness and disease, which, sooner or later would be communicated to their progeny.

The system of "crossing" is founded on a principle just as secure, as regards care in selection, as that adopted by Bakewell in breeding in-and-in. For, it is well known that certain diseases are hereditary, and so is color, none of which can be changed nor got rid of except by crossing. This system, therefore, requires great care in selection, as well as in management. This tendency of "like begetting like," is forcibly illustrated in the results of crossing various breeds of cattle, such as Devons with Herefords, both the color and form of the parent animals being thereby modified or changed.

As a general rule, animals produced by crossing are the most profitable either for meat or milk. Most of our good breeds have been perfected by this system, and selection has long maintained them. A cross is comparatively the operation of a moment; and its end once attained, the breeder's object is *not to repeat*, but to *maintain* it. B.

BEWARE OF THE RING BONE.—If colts stand on a plank or any hard floor that is not well littered, they will be subject to the ring bone. When breeding horses, we left the floor of the colt's stables, of the soil over which they were built. If this should be a deep loam, or of a clayey texture, then remove the soil about two feet deep, and replace it with sand, or the finest gravel to be obtained. Colts should also be let out to exercise in a yard, or open space, every day during the winter, when not particularly stormy; and in this yard there should not be older horses, or any horned animal which can do them injury. Being very playful, they are more apt to provoke attacks upon them than other animals.

COTTON CROP AND PROSPECTS.

ALTHOUGH the article cotton bears now a very reduced price, yet it is a crop of so much importance that you may possibly wish to know something of it from this, the "banner state" for cotton. I have not personally seen so much of the crop this season as usual, but my information from reliable sources and from letters is more full.

Last year I placed my figures at 2,200,000 bales, and the crop of New Orleans at 1,150,000 bales. I was wrong in the first about 150,000 bales, and in the second about 70,000. If we consider the remarkably late period of a killing frost, 20th November, and the extraordinary fine fall for picking, I presume my estimates will bear to repeat now.

I now place the crop of the United States, at a little over my last year's estimate, and yet with the ordinary increase, I cannot think it will exceed that of the last year. I therefore place 2,300,000 as the ultimate figures—and that of New Orleans at 1,200,000 bales. My reason for so doing is as follows:—We had a killing frost on the 2d of November, earlier than for years I think. Crops in this country were more difficult to cultivate this year than I ever knew them, and were generally more injured by grass and seasons. Yet those who did cultivate well, are making very large crops. There was too much rain for the rich low grounds, at one time, but the favorable months of September and October made a very great difference. There are many planters now done picking, and others with nothing left but the gleanings. The crops of Alabama and a part of Georgia are fine, whilst a part of Carolina, Georgia and Mississippi cannot make over a half crop. The region that ships to New Orleans, is fully competent with a fair average season, to grow one half that is now made, and last year, she actually received one half the crop. Whilst she must increase, the seaboard states must diminish, and I think the day is not distant when New Orleans will ship 1,500,000 bales.

We must bear in mind when we are considering the resources of this vast valley, that the enterprise of her citizens will render futile all ordinary calculations. We are almost mad with the improvement on cotton seed. You hear planters of great respectability speak of growing 2,000 lbs., 3,000 lbs., and even more per acre upon land, that never did grow over 1,500 or 2,000 lbs. And the picking of hands is equally great. I know it will be looked on as humbuggery to talk of these matters, but if true, it would be well for that "gallant state" and her two sisters also, to be up and doing, to be preparing for the day when cotton cannot be grown by them.

A neighbor of mine had picked from one field planted with improved cotton seed, by the 15th of October, 1,000 lbs. per acre, some of his hands picking for days together an average of 3 to 400 lbs. per day. And as an evidence of what has been done, I have a boy about 16 years of age, that picked in October, 1847, 6,116 lbs. and in September, 1848, 5,872 lbs.; and if I had a full crop in, with the improved seed and good culture, he could do this for 3 months, as a whip was never cracked at him—and only "25 cents for every 500." This boy picked over 4 bales per month, and last year he picked out eleven bales, I think, as I care not to go over figures now. And my entire hands gathered 9 bales last year before the 20th of December; this year 5 bales per head were off, corn gathered, potatoes and pindars dug by the 2d day of November.

I believe it to be entirely feasible, that with the present improvement in cotton seed, that all the lime portions of Mississippi, though much worn, and all the rich lands, can be made without much extra labor to produce 300 to 500 lbs. more of cotton than they now do. I believe sincerely that I have seen a piece of land that produced this year, over 1,500 lbs., that could not have produced 1,000 lbs. of our ordinary seed. Suppose that all this valley would enter into the same spirit of improvement, the crop would swell to 50 per cent. more, and thus would New Orleans receive 1,800,000 bales. What would the old lands in the Atlantic states do?

M. W. PHILIPS.

Edwards, Miss., November 8th, 1848.

P. S. *Nov* 12. I now find, that nearly all of late balls are destroyed by the frost, which must cut off a large part of planters' calculation. My own crop is as short as in 1846, the worm year. There are others who are much shorter than I am. I know at least half a dozen not far off; one will not make over three or four bales; the highest crops are made on that plantation. I have known it eighteen years. Another has finished picking in ten days, and so on.

P.

THERE were two powerful causes to depress prices of cotton last season, to say nothing of the temporary influence resulting from our late war with Mexico. The first was a full (not an over), production of the last preceding crop; but the second, and by far the most influential, was the paralysis of nearly all business operations on the continent, in consequence of the late general revolutions in Europe. Notwithstanding the abundance of the crops, the price opened well early in the season, and the quantity did not seem to weigh heavily upon the markets, till the news of the revolution in France, when sales and prices dropped as suddenly as the heads of the old revolutionists under the guillotine. They have not since revived, and probably will not until reliable governments are re-established in Europe.

From the preceding estimates of the present crop and the opinions which each may form for himself, of the restoring elements in European affairs, are the ruling prices to be conjectured for the coming year. So far as our own government is concerned, most of the present appearances are favorable. We have concluded a peace with Mexico—our relations are pacific with all the world—our commerce is extending, and our agriculture and the useful arts are moderately prosperous (although they might be more so), and we have passed beyond the doubts and uncertaintities of the presidential and congressional elections, and reached ground where a majority of our intelligent business men consider we shall at least be safe for the next four years. As the largest demand, however, is from abroad, and our crop is abundant, we shall for ourselves, look for moderate prices in this staple, for at least a year to come.

Professor McKay, of Georgia, in an able article in the Merchant's Magazine for January, estimates

the production of the United States for 1849, at 2,550,000 bales; and that of the whole world at 2,800,000 bales, and then adds: "This exceeds considerably the amount of any former year, but as prices are very low, and as the consumption in the United States has gone steadily forward, the demand will nearly equal this, in spite of the wars and disturbances in Europe. The stocks on hand are not extraordinarily large at present, and this slight increase can be borne without further depressing prices."

With the above information, we leave this matter now with our readers, presuming that each one is furnished with such data as will enable him satisfactorily to make up his own estimate of the cotton crop.

CHEAP METHOD OF FATTENING POULTRY.

Of the great quantity of poultry raised in this country, I am surprised that so much of it should be of ordinary quality, when so little trouble is required to make it excellent; and, in order to sustain this assertion, I will detail a small experiment made by me, solely with a view to convince myself of the feasibility of *fattening poultry cheaply*.

In November, 1844, I had a box made and divided into three parts, eight inches by fourteen, just large enough to admit one fowl to each division. It was made tight enough to exclude the light of day mostly, yet I left openings enough for fresh air. I then placed two roosters and one hen turkey, in the box (one fowl in each division), confining their feet to the floor, so that they could not move from the position in which I placed them. The front of the box, I hung on hinges, for convenience of feeding, &c.

Most people have noticed that at sunrise and sunset, all kinds of poultry eat voraciously, and I supposed that if they were kept in the dark (at which time of quiet all animals fatten most), and the sunlight admitted several times during the day, and fed at that time, they might be induced to take on fat rapidly, and in this I was not disappointed. I fed them with rice boiled in milk, and sweetened with molasses, giving them water to drink but once during their confinement, and at the end of sixteen days I killed them—handsomer, and fatter birds I never saw. By some such method as this, I have no doubt that the income of farmers from this source, might be greatly augmented. A series of well-conducted experiments of this kind might be of benefit to your readers and the public generally. Who will undertake it?

In vol. 6, p. 192 of the Agriculturist, "Mr. Phares" said he would communicate a simple method of *caponizing fowls* without the usual array of implements. I have, in common with the rest of your subscribers, waited patiently for it till now. Can he not communicate it in your next number? J. B. D.

Boston, December, 1848.

The method pursued by our correspondent, to fatten his poultry, is, with the exception of mixing grease of some kind with the food, one of the most *rapid* with which we are acquainted; but whether one of the *best*, is quite another question. We never ate meat of any kind thus fatted, which was not soft, flabby, and tasteless; and we also think, unhealthy. The system of "box feeding," as it is termed, and at present getting into vogue rapidly in England, is very objectionable. They confine fattening cattle in boxes, almost as closely as our correspondent says he did his fowls. What is it that gives Southdown and Welch mutton its delicious flavor? It is the active habits of the sheep, combined with the superior sweet and nutritious grasses they feed on, which grows in their hilly and mountain pastures. The delicacy of the lean, tender meat of the game-cock breed of fowls, is owing, in a measure, to their active habits, and not being too closely confined when fattening. It is this, also, which makes the meat of all well-fatted game so delicious, such as venison, moose meat, pheasants, grouse, &c.

NEW VARIETY OF APPLE.

I HEREWITH send you some samples of an apple which is said to have originated in this place, and is much esteemed by all my neighbors who have cultivated it. I have never seen it in market, and I believe it is unknown out of Norwalk. It is called the "Buck-Meadow apple" here, from its having first been found in an old meadow by that name, and is supposed to be a seedling.

If this apple is not known among fruit growers, please to describe its qualities under some appropriate name, and oblige GEORGE SEYMOUR.

South Norwalk, Ct., Dec. 4th, 1848.

The above apple is of an excellent flavor, and appears to possess good keeping qualities. We have sent a sample to the N. Y. State Agricultural Society, which will be examined at their next meeting.

STEAM POWER FOR AGRICULTURAL PURPOSES

FROM the variety and space required for most operations on the farm, steam power has, thus far, scarcely been adopted for agricultural purposes generally. Many experiments have been made in England and elsewhere with the steam plow, but it has not yet been made to work successfully for the pulverization or removal of earth to any extent.

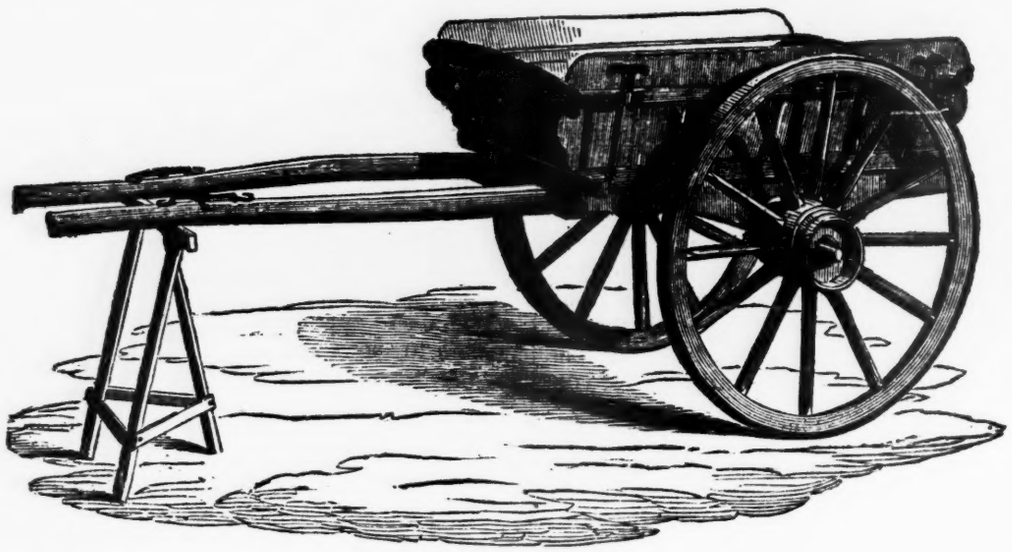
Our recent English exchange periodicals bring us a description of a *steam excavator*, which promises great results. It can also be worked by horse power. It is stated, that when propelled by horses, it will cut a ditch at a single operation, three to five feet deep, at the rate of four feet in length per minute, leaving a finished excavation, with smooth bottom to receive the tiles for underdraining. The width is not stated, but it is supposed to have been only wide enough to admit of laying down the draining tiles. This machine has also been applied to deep subsoiling and pulverizing the earth, to the depth of twenty or thirty inches; and also to bringing up so much of the subsoil and mixing with the surface as may be required. The price in England, is stated at $150.

We know nothing of the merits of this machine, but wish some of our agricultural associations, or some liberal and enterprising individuals, would occasionally import similar improvements, and if not entirely adapted to our necessities, Yankee ingenuity might soon alter them to suit our wants.

LARGE HORSE CART.

THE cut below represents a very useful farm and plantation tumbrel cart. It is much more convenient than a four-wheeled wagon in many respects. It can be worked either by one or more horses; one or two additional horses can be hitched to it side by side, to draw outside the thills, or they can draw *in tandem* if preferred. It admits of easy backing or short turning, which is of great advantage in particular locations, and especially among thickly-planted rows upon the field.

But its greatest advantage is in the facility of dumping, or upsetting, the load by removing the catch or staple, which confines the box upon the thills in front, when a little effort sends the box nearly perpendicular, whirling over upon its axis (the axletree), by which the load is summarily disposed of. In discharging dirt, manure, sugar cane, and many other crops, this is an item of great consideration. Prices, from $50 to $80.



HORSE CART.—FIG. 3.

TO KEEP UP A CONSTANT FERTILITY IN THE SOIL.

THE object which we have in view in manuring our lands, is to keep up a constant fertility, which will enable us to reap from them every year the largest possible crops. It is but reasonable to suppose, then, that constant cropping would speedily exhaust any soil, unless we return to it, in some shape or other, those substances of which we deprive it; and that this is in reality the fact, every day's experience proves to us. It has often been demonstrated, that if plants, grown on any given space of land, be plowed into the soil whilst they are in a green and succulent condition, the fertility of that land is much increased.

This proceeds from the quantity of nutriment those plants have abstracted from the atmosphere during their growth; so that by their being plowed into the soil whereon they had grown, they afford to it a much greater amount of substances than they receive from it, and consequently whatever excess they may furnish, so far enriches the soil.

Some plants are much more remarkable in this respect than others, for instance, lucern, or clover, plowed into the soil previous to blossoming, enriches it exceedingly. This is what is sometimes termed "green soiling;" and by it, the plant used is made the means of conveying to the soil the carbon and ammonia, which in its growth it extracts from the atmosphere. It also appropriates to its own use the excrementitious matter deposited by other descriptions of plants growing in the soil previously, and deposits its own excrement, which serves as food to others succeeding it. In the middle and northern parts of the United States, and all cold climates this excrementitious matter, voided by plants, is much longer passing into putrefaction than in tropical countries; the necessity, therefore, of adopting a rotation of crops is much greater in the former than in the latter.

All plants void excrements, which, when acted on by air and moisture, putrifies and becomes converted into "humus," or vegetable matter in a state of decay. This deposit of organic matter is common to all plants and exercises a very beneficial influence on land, by furnishing it with a substance capable of being converted into humus, which is so desirable in a soil; but plants cannot long be replanted in the same soil without being seriously affected by their own excrement; so much so that at length they altogether fail. Artificial aid, however, induces a more speedy conversion of this matter into humus, than would otherwise take place, which is effected by frequently turning up the soil with the plow or hoe, so as to expose the excrement to the influence of the atmosphere; and by irrigating the land with river water; as the water of rivers and streams contains oxygen in solution, which effects the most rapid and complete putrefaction of the excrementitious matter contained in the soil which it penetrates.—*Organic Chemistry.*

SELECT GOOD STOCK.—A great hindrance to the increase of good stock, arises from the farmer not being aware of the difference in the value between one breed and another. Many argue that "cows are but cows;" and that if those they have are well kept and carefully bred, they would be as good as any others.—*R. Jardine.*

A CHEAP PAINT.—SOAK FOR WHEAT.

Your Reviewer, in p. 339, wishes to know if "a cheap paint" is calculated for outside painting. Tell him it will do for any side.

For five consecutive years, I have soaked my seed wheat in blue stone (sulphate of copper), and have had neither smut nor Hessian fly. The proportion is 1 lb. to every 5 bushels of wheat, which is put in soak in the evening for the next day's sowing, keeping the water to put the next wheat in, adding enough more water with its proportion of blue vitriol to cover the wheat. It should be dissolved in a small quantity of hot water, as it is hard to dissolve in cold. If the weather should become wet and any of the soaked seed not sown, it may be spread in an outhouse without injury, till the ground is fit to receive it. James Boyle.

Annapolis, Nov. 13th, 1848.

In addition to the above, we have received the following communication on the same subject:—

Let me ask my "quaint" old friend, Reviewer, to turn to p. 378 of Pingry's "Painter and Varnisher's Guide," printed in London, in 1816, and he will find a full and scientific account of *cheap paint*.

Mr. Boyle has described only one mode of preparation, applicable to in-door work. The addition of white Burgundy pitch makes a paint for out-door objects. Having used this paint, I can answer for its excellence. The recipe given by Mr. Boyle is used by the Italians and others in every kind of "distemper" work made with chalk or argillaceous earths. C. D.

Seneca, N. Y. Nov. 1848.

Upland, or Mountain Rice.—This yields a fine crop on poor, sandy ridges, and will not thrive on lands that are wet. It differs but very little in its appearance from the low-land rice, except that it grows to only about half the height. It is generally sown in drills about eighteen inches apart, and worked both with the plow and hoe to keep out grass and weeds. It may be sown in the southern states from the beginning to the end of March. It yields a good crop of hay the first season, and often springs up from the same roots the following spring. Two bushels of seed are sufficient for an acre.

Another method, thought by some to be better, is, to sow broadcast, harrow in, and then cover the ground two inches thick with old rice straw, which will keep down the grass and weeds, and nourish the growing crop. The upland rice will yield about 1,000 lbs. per acre.

The Best Manure for Sugar Cane.—The very best manure in the world for cane plants is believed to be the cane plant itself; and if to this be added a liberal *atmospheric manuring* (plowing), nothing further will be required to keep up a continual and unimpaired fertility. The cane trash and leaves, in decaying, become converted into humus, or vegetable mold, and supply an abundant store of carbonic acid and nitrogen to the young plants. Their ashes contain silicate of potash; carbonates of lime and potash; phosphates of lime, soda, and magnesia, phosphoric acid, oxides of iron, &c., &c.

PEAR TREES INJURED BY INSECTS.

The following correspondence between Dr. Plumb, of Salisbury, Ct., and Professor Harris, of Harvard University, cannot fail to be read with deep interest by all of our readers who are engaged in the cultivation of the pear, particularly by those who have been puzzled for a long time as to the cause of an apparent disease, which after all is nothing but the work of an insignificant insect:—

When a man has arrived to half your eminence in any profession, he is considered public property, I will, therefore, make no other apology for this intrusion.

From the year 1834 till 1838, inclusive, I lost several hundred pear trees by one disease, most of which were young. They have not been troubled with the malady since, until the present year. Now some thirty are affected. The bark turns black, beginning to change sometimes as early as July; more often in August; then again not until September. Sometimes I lose trees by the disease called "pear blight," which first appears by a change in the leaves. But the disease I wish now to describe, shows itself first in the bark. The leaves go through the season well enough; the greater part of the trees do not put on foliage the next season; some leaf out, partially, two years; yet the disease has terminated fatally, in every instance, with me. I have sometimes cut off small trees near the ground, and grafted them. Occasionally they live a few years; but it is lost labor.

The present season, I have become jealous of an insect being the author of the mischief. I first observed them on the affected trees in September; yet they might have been there through the season. They were found on the diseased trees, and no where else. I do not find them exactly described in your valuable report to the Massachusetts Legislature. They appear to belong to the aphis tribe, and jump like fleas. I send you specimens of the insect in their various stages of existence, and likewise of the disease. The insects were caught about the middle of November. Any information relative to their natural history, or to the disease affecting my trees will be thankfully received.

Ovid Plumb.

Salisbury, Ct., Dec. 4th, 1848.

PROFESSOR HARRIS' REPLY.

You have correctly stated that the insects which injured your pear trees, "belong to the aphis tribe, and jump like fleas." Although this particular species is not described in my Report, or "Treatise on Insects Injurious to Vegetation," some brief remarks on the genus *Psyla*, to which these leaping plant lice pertain, will be found in the work, pages 186, 187.

All the specimens sent had completed their transformations, and were in the winged, or adult state, both males and females; but were injured somewhat by mold, and had probably lost their natural colors by drying, so as to render it uncertain whether they belong to any described species or not. It is highly probable, however, that they are the true *Psyla pyri*, of European naturalists, and cultivators, or a closely-allied indigenous species.

Not being acquainted with your insect in the

living state, I cannot give any account of its habits and transformations from personal observation; but will add some remarks upon those of the European *Psyla* of the pear tree, as related in foreign works. It is not unlikely that they will apply equally well to your insect.

The *Pear Psyla*, of Europe, in its winged state, is about the size of a large aphis. The sexes pair in the spring; and the female lays her eggs as soon as the buds begin to expand. The eggs are deposited in great numbers, near each other, on the young leaves, blossoms, newly-formed fruit, and shoots. They are oblong, yellowish, and look somewhat like grains of pollen. The young, hatched therefrom soon afterwards, resemble wingless plant lice, and are of a dark yellow color. They change their skins and color repeatedly; and in the course of their growth acquire rudimentary wings, when they are said to have entered the pupa state. While still young, they fix themselves to the bark of the twigs of the last year's growth, one after another, in rows, and there remain till their last change approaches. By means of their suckers, which come from the under side of the head near the breast, they puncture the bark and imbibe the sap. Like many aphides, they gorge themselves to such a degree, that the fluid issues constanty from their bodies in drops, is ejected over the surface of the twigs, and mingled with their more solid castings, defiles the bark, and gives it a blackish color, precisely, it would seem, like that of the twigs which you sent to me. They continue their polluting and exhausting spoliations throughout the summer; and, in the autumn, having come to their growth, they disperse among the leaves, cast off their pupa skins, issue in the winged or adult state, and are ready to take wing in search of winter quarters. In some sheltered crevice, or other retreat, they pass the winter; and, on the return of spring, come forth, pair, and lay their eggs.

It is observed that when considerable numbers attack a pear tree, the latter soon assumes an unhealthy appearance, its growth is checked, its leaves and shoots curl up, and the tree dries by degrees, if not freed from its depredators.

Köllar recommends brushing off the insects when young, with a brush of hog's bristles, and crushing under foot those that fall; and advised also that, in the month of May, when the winged females are about laying their eggs, the insects should be searched for, and destroyed by hand. Such a process, however, would be thought altogether too tedious and uncertain here. I would therefore suggest the expediency of washing the twigs with a brush dipped in strong soapsuds, containing a considerable quantity of flour of sulphur stirred into it. If this be done *before the buds expand*, the latter will not be injured thereby, while the sulphur and soap will so coat the twigs as to deter the *psylæ* from laying their eggs upon them. A weaker application of the same may suffice to kill the young insects after they have fastened themselves upon the bark.

On some of the little twigs sent, I saw a few of the scale insects belonging to the genus *coccus*. These have been very troublesome to my young apple trees; aud I have got rid of them, after failing with Judge Buel's wash, by painting the trees, from bottom to the tips of the twigs, with soft soap, early in the spring. Common household soft soap, applied in this way, proved completely effectual. It was put on with a painter's brush.

The insects accompanying the foregoing letter, were of a brownish color, with transparent wings, marked by a few dark veins. Each measured one tenth of an inch, or rather more, from the forehead to the tips of the closed wings. The front of the head is notched in the middle. The eyes are large and prominent, and with the thorax, resemble somewhat in form those of our common *cicada*. The antennæ are longer than the body, slender, or threadlike, and tipped at the end with two little bristles. The body of the female is pointed at the end, and is more of a reddish hue than that of the male.

THADDEUS W. HARRIS

Cambridge, Mass., Dec. 9th, 1848.

YANKEE FARMING.—No. 8.

Good people all of every sort,
Give ear unto my song;
And if you find it wondrous short,
It cannot hold you long.—*Goldsmith.*

Improvement of Bog Meadows.—My readers (if perchance I happen to have any), will recollect in the first number of these sketches,* that I spoke of Uncle Sim's bog meadows; but as many out of good old Yankeedom may not know exactly what these are, I will take the liberty of briefly explaining.

A bog meadow, then, is a flat, alluvial formation, of a greater or less depth of rich, vegetable soil, abounding with springs, or so much overflowed by some stream running through it, as to keep the ground completely saturated with water; and hence, precludes the growth of anything more valuable upon it than a coarse, watery grass, of a very poor quality. Such a meadow is generally easily drained by ditching it sufficiently to carry off the spring water, or by excavating the bed of the stream bordering it; yet, occasionally, both these operations become necessary. But whenever well done, a bog meadow or swamp, is soon changed into the most valuable land we have for the production of red top, Timothy, and clover; and frequently when put under the plow, proves first-rate corn and potato land.

Attached to Uncle Sim's farm, were about twenty acres of this kind of bog meadow; and though the grass which grew there was hardly equal to rye straw, yet he annually mowed it at a cost of labor greater than the miserable hay was worth when stacked; and this he fed to his young cattle during the winter, which checked their growth, and left them in the spring as poor as a half-starved crow.

Year after year had I endeavored to persuade him to drain this meadow; and moreover, when done, in consequence of there being several feet fall in the stream just before it entered its borders, he could easily build a dam across with a sluice way, through which to irrigate it at will, and thus keep up its fertility without the trouble of manuring; and yet take large crops from it every year, worth at least six times what it now produced.

Till Uncle Sim had got stuck in the snow with

* See vol. 7, page 30 of the Agriculturist.—ED.

his big log, and was indebted to the doughty little Major Godell to help him out of his difficulty, all I could say had no effect upon him; but one day after his late famous mowing bee, as we were fishing along the banks of Silver Brook, I broached the subject again, when his obstinacy slightly gave way, and he seemed half overcome by my arguments, and almost made up his mind to try an experiment with a few acres that very season. But then, again, up rose his deep-abiding prejudices; "his father nor grandfather, nor no other Doolittle he had ever heerd on, had ever done the like; then why should he? It seemed clear agin nater. If the bogs was to be dry, then they would 'a bin made so." Yes, I replied, and by the same course of reasoning, your famous nine acre mowing lot, which yields such large burtherns of the best of hay, according to your principles should still remain in the original forest that your ancestors found it, when they first came to settle here. I dare say, had the aboriginal inhabitants been asked why they did not clear off the trees and sow it with grass, and keep cattle, they would have answered something as you do: "That if the Great Spirit had designed it for such a purpose, he would have formed it so; that Indians were created to live in the woods and hunt bears and deer for a living, and not to cultivate meadows and breed cattle." The truth is, in one sense, there is no such thing as following nature. We must compel her to follow, or rather work for us. "Wal, Sargeant, I don't know how it is, yet somehow or nother you allous out argue me; but then you be so bookish I can't stomach that"—snapping his fingers with great contempt—"and you are etarnally talkin' about what them 'ere big dukes, and lords, and sirs, is a doin' on over the water. I hate all 'ristocrats as a mushquash does a mink; though the neighbors still call me a 'ristocrat, cause I'm a federal, while every body else in town, 'cept minister and old deacon Billins, has got ashamed o' the name (and yit General Washington was one, and war'nt he the greatest and best man that ever lived?), and turned republican, or whig, or dimicrat, or loky-foky, or somethin' else, I knows nothin' about. Oh, yes! a 'ristocrat is just like a mink; he sucks the blood out of the mushquash, though they be the biggest and most industrious. But a mink 's the cunninest—the insiniatin' rascal—and 'tis he that's killed all my ducks, 'cept an old drake, and half my goslins' this summer. I only wish I had him here now"—and then he shut his teeth firm together, grinned, shook his head as a dog would with a woodchuck in his mouth, and squeezed his vice-like fists—"I'd choke his life out on him, the oily black villain that he is!"

Never mind politics, my good neighbor, said I, appeasingly; recollect we are talking about farming; and as for titled personages, why you know I care as little for them in the abstract as you do; but then, the opinion of such a man as Sir Humphrey Davy, one of the best agricultural chemists of his day, or the experiments of so excellent a practical farmer as the Duke of Portland, or Earl Spencer, are not to be gainsayed, although they may bear titles, which fortunately in our happy political condition are not allowable, yet they are men, and consequently their opinions are as good as if they were the best republicans to be found in the land. "Wal, but its all book farmin' that you're talkin' about, and this, you know, Sargeant, I hate. It's like 'a dog etarnally barkin', but which never bites;' and that goes to signify it's all talk and no work." Yes, but book farming, as you term it, is the faithful record of preceding work. "No sich a thing, sir. No; it's only some vagabone of a fellar that's too lazy to work, and so he goes to writin'. Wal, that makes me think o' the barkin' dog agin. One puppy sets up a yelp, and all the tothers in town jines in. One book makes another, till the world gets so full on 'em if a body lived as old as Mathuselah, he'd hardly git time to read even their titles, to say nothin' of their contents; so I jist lets 'em all alone, I do, which saves my money and my time, too. 'It aint all goold that glistens,' I can tell you, Sargeant. Book makers is consated, they thinks nothin' can be done without 'em; and him that reads 'em, 'goes out for wool and comes home shorn.' 'Never buy a pig in a poke.' 'Say well is purty good, but do well, accordin' to my notion, is a great deal better.'"

"Do *well*," I repeated, catching up some of his last words, before he could take breath to continue with his never-ending repetition of old proverbs, that is exactly what I am at, Mr. Doo*little*, I added, strongly emphasizing the two last syllables of his name; for I felt a little nettled at his prejudiced tirade against agricultural books.

By this time we had fished so far down the stream that we had unconsciously crossed Uncle Sim's line, and got on to the premises of his nearest neighbor, Joe Watkins, who, to our mutual surprise, the past month, had been doing with his meadow, exactly what I had recommended to Mr. Doolittle. And now, I continued, if you don't like the operation of aristocrats, please to see what that "simple critter," as you term him, our friend Joseph, has accomplished. If he don't prove wiser than yourself in this matter, I am then greatly mistaken. "Yes," said Watkins, advancing to meet us with spade in hand, and all splashed with mud, his pantaloons rolled up above his knees, and his shirt sleeves above his elbows—"didn't I go up the old Connecticut, last year? And didn't I see how rich it made them 'ere big meadows by its annual overflowins? And havn't I read in the Bible about the overflowin', too, of the Nile?" Take care what you say, Joe, I replied, or Mr. Doolittle here, will shut your mouth with an essay against book farming. "Wal, let him try, then," he answered, rather doggedly, "for I've seen now as well as read; and it was beyond belief the great crops of rye, and Indian corn, and broom corn, and grass, and I don't know what all I found jist from them 'ere overflowins, and waterins. Then says I to myself, says I, Joe, if them 'ere big rivers can do all this, when I get hum, I'll jist see what that 'ere ittle river, Silver Brook, will do on my meaders, I will—but I'll drain 'em fust; and so you see, Sergeant, here I be."

Good, Joe, said I slapping him approvingly on the back, you are the man for my money; and one of these days I'll tell you about the chemical value of water, and the fertilizing properties it holds in solution; but we'll take good care that Uncle Sim is not by to hear us. "No you won't, nother," sharply spoke up our obstinate, anti-book farmer,

at the same time slapping his thigh and cocking up one eye, "I'll be there jist to plague ye, if nothin' else. Howsomdever, if you reckon I'm goin' to be beat by *Old* Mr. Joseph, of the Nile, or Mr. *Travelled* Joseph, of the Connecticut, or Mr. *Ditch Diggin'* Joseph, of Silver Brook, you are amazin' mistaken, I can tell you. I'll have every spring cut off from my meader this month a year, and that's more than Joe has yet done; and I'll ax none o' your books to help me nother. All I want is my own head, and feet, and hands, and them of my boys; 'in for a penny, in for a pound—' "Bravo, I interrupted, quoting a proverb to match his, and put an end to a dozen more I feared would be forthcoming, 'a good resolve is half the work;' but we are out fishing now, so let's done with the meadow talk for the present.

Well, Joe, though we have caught plenty of other fish, as you see, we have not been able to get a trout bite during the whole day. You are a genius in this line, can't you help us to some? He replied the weather was too hot, and they were too well fed and sluggish to rise to the bait from the cool, deep places where they nestled, yet if we liked, he would try his hand at "ticklin' up a mess for us." "Ticklin' trout," exclaimed Uncle Sim, with eyes and mouth suddenly wide open, "what's that? I never heerd o' sich a thing; why, you might as well talk to me about animal magnetizin' 'em; but I guess you wont find the shy critters settin' sleepy, like foolish humans to be rubbed down the head and sides at will." "Come along, then, Mr. Doo*doubtful*," added Joe, a little nettled at the want of faith of my neighbor in his proposed operations, "and if I don't show you a thing or two, then I'm willin' to get a duckin' for nothin'."

Saying this, he led off to a pool in the brook about twenty feet broad, and five feet deep. Here we found the water so clear, and the gravelly bottom so white and clean, that we could distinctly see now and then, the tail of a fine trout, just peeping from under a large loose stone, or thin ledge of rock, while his body was waving to and fro in the smooth still water. "There," said Joe, "now stand back;" and instantly divested himself of his hat and shirt, and then tying his pants close around his waist with his suspenders, he took up a heavy stone in each hand, for ballast, silently sunk into the lower edge of the pool, and darted like an otter for the trout. As he reached the rock under which they lay, he quietly let go his ballast, seized the ledge with his left hand to prevent his rising, and with the right he carefully began touching the trout at the tail, then up its sides, till he reached the gills, which being partly open, he instantly inserted his thumb in one, and forefinger in the other, and to Uncle Sim's utter surprise, backed a few feet down the stream, and then rose with it to the surface of the water, and brought it ashore. This he repeated on an average two or three times from each pool, before frightening them, and at last obtained each of us a good mess.

This great and unexpected success, so excited Uncle Sim, that he resolved to undertake *tickling* the next pool. It was in vain I told him that with his great bulk, he could not possibly rival the eel-like form of Joe Watkins, and that he would only frighten the trout away, and injure the subsequent fishing; but he would not listen to reason; "he could tickle them out o' their seven senses, sartin sure, as well as the best man alive;" and so he stripped himself to the task. At this, Joe gave me a sly wink, and then sang out, "here, Uncle Sim, is the tail of a whopper; now's your time."

Without looking very closely, in plunged Mr. Doolittle, and down he dove for his prey, eyes wide open. He had not been under the water ten seconds, before he rose to the top blowing like a porpoise, and splashing with something large and heavy, which we could but indistinctly see, fast hold of his right forefinger.

"Joe," he yelled out like a wounded loon, as soon as he could get his breath, "you everlastin' scoundrel; why didn't you tell me that trout bit? I'll wallop your hide off on you for this trick, you tarnal ugly critter." Joe was ready to die laughing, and for the life of me I could not but join with him, when I saw that instead of catching a trout, a great black mud turtle had caught Uncle Sim by the hand! But the moment he lifted him clear of the water, the turtle let go his hold, so that Mr. Doolittle luckily escaped with a few moments of sharp pain, but a wound followed that took nearly a month to heal. This taught him not to be quite so presumptuous and obstinate for the future; and that Joe was not altogether quite the "simple critter" he took the liberty of too frequently calling him.

SERGEANT TELTRUE.

P. S. I beg, Mr. Editor, through you, to present my compliments to our excellent old friend Reviewer, and say that I appreciate very highly the flattering notices he has, from time to time, been so kind as to take of my humble sketches. His good opinion alone would have been a sufficient incentive for me to have gone on, and contributed regularly, to every number of your excellent paper; but having unfortunately sprained my wrist, in pitching, the last day of my haying the past summer, it has been impossible for me to take pen to write till now, except with great pain. If by my lucubrations I have afforded Reviewer one tithe the profit and pleasure that he has me, by his practical good sense, shrewd criticisms, and quaint wit, I am more than satisfied; and trust that whatever *I* may do, *he* will continue his writing; and that one of these days we may see each other, face to face, when we will colloquize with less restraint than we now do in the pages of the Agriculturist. S. T.

Agoknequaw, December, 1848.

IMPORTATION OF PURE BRED SAXON SHEEP.

WE were highly gratified in noticing on board the barque Weiland, from Bremen, arrived here on the 25th November, a lot of seventeen Saxon sheep, for Mr. J. A. Taintor, and Abijah Catlin, Esq., of Hartford, Connecticut. These sheep were purchased under the direction of Mr. Taintor, from two of the choicest flocks in upper Saxony; and notwithstanding their long journey, they arrived in good health and condition.

The wool of these sheep is of the finest and best quality; and the animals have more size, and we should think constitution also, than any other Saxon sheep we ever saw. Indeed, till now, we have had but an imperfect notion of what constituted a

first rate Saxon sheep. To give our readers an idea of these superb animals, we would inform them that a three-year-old buck weighs 150 lbs.; at the same time, he is of fine proportions, and carries the largest, and one of the finest and softest fleeces we ever inspected. The younger rams are equally promising of their age. The lot strike us as being as much superior to ordinary Saxons, as Mr. Taintor's several importations of the Spanish Merinos have proved. His personal acquaintance with the largest wool growers of Spain, France, and Germany, gives him a decided advantage in importing the very best sheep which those countries produce.

The number of *really fine* or Electoral Sheep in Saxony, has never exceeded one and a half millions. At this time there are but about thirteen hundred thousand.

During the past four years, large numbers have been taken to Russia for the purpose of improving the sheep of that country. Immense flocks are now forming near the sea of Azof, where the soil and climate have proved highly favorable for the production of fine wool. In the United States, we have millions of acres equally well suited to the growth of this superior quality of wool, and we regret that more attention is not given to its production, for it could not but be profitable. The clip of the best flocks in Saxony, is sold in fleeces at very near a dollar a pound, to the fine broadcloth manufacturers of Belgium and France. As the duty is low on wool imported into these countries, why may not the United Stafes assist to supply the demand as well as Saxony?

We recommend those who desire to improve their fine flocks, to examine this importation of Messrs. Taintor and Catlin. We are confident they will be highly gratified in doing so; and acknowledge with ourselves, that they are deserving the best wishes of all American flockmasters, for their patriotic and meritorious efforts in so liberally furnishing the means of improving the fine-wooled sheep of our country.

SOUTHERN MATTERS.

R. L. Allen having withdrawn from the agricultural implement warehouse, in New Orleans, the business will hereafter be continued, at the corner of Magazine and Poydras streets, in that city, by Mr. Stephen Franklin. From his large stock, ability and long acquaintance with the business of the south, we do not hesitate to recommend his establishment as every way worthy the support of intelligent and *improving* planters.

Now, that our own interest is not concerned in the remark, we may be excused for telling our southern friends plainly, what we have long been satisfied, was the truth. And this simply is, that their interests and advantage are vastly more concerned in the adoption of improved, well-made implements, than either the manufacturers or venders. They can realize as much profit, and frequently more—on a poorly-made or indifferent article as on the best; but it is the consumer who is to be benefited by the good and the durable implements.

It is said, "improved tools are not suited to the south." This is a song that is sung from the Potomac, the Ohio, and Missouri to the gulf, and when the chorus for the thousandth time is repeated, the planter thinks the argument exhausted. Let us reason together for a moment on this matter. Are there any steam engines, tobacco and cotton presses, hemp brakes, and water-rotting vats? Any plows, hoes, spades, and shovels? Any sugar machinery, costing from $5,000 to even $50,000 for a single plantation? Why is all this if *improved* implements are not adapted to the south? The Indians did not use any of these. A bow and arrow, a stone sharpened by rude attrition, or some coarse wooden implements prepared by the fire, were all the tools brought to the aid of savage life. Had the suggestion been made to them of the adoption of better tools, the reply would have been just what is now daily made elsewhere—"they are not adapted to the capacity and habits of our laboring people." The answer should be—"if they can do the work better and more expeditiously, or economically, we will instruct them to their use, we will make them habitual to them." Surely the advance in the capacity for using farming tools between an original Congo or Guineaman, and his well-instructed descendant, on our best-managed southern planations, is sufficient evidence of capacity to justify advancing a step farther in the career of improvement. This fact decides something besides incapacity of the laborer; it rather proves imbecility or negligence on the part of master or overseer. We have so often seen the success of a different policy where properly undertaken and perseveringly followed up, that we doubt all conclusions that deny the possibilities of progress in improvement at the south.

We would then say to such of our southern friends as may thus far have noticed our remarks, go on in the career of improvement so auspiciously commenced;—there is no real obstacle to your progress; nothing but what is wholly imaginary, and will vanish on any well-directed efforts to remove it. Sufficient success has already been realized, to justify the most sanguine anticipations hereafter. We shall look confidently to the future for augmented, crops, while the cost of their production is diminished—a result easily attainable wherever scientific treatment of the soil, manures, and products, with the use of improved implements is adopted.

The Volatile Parts of Plants when Consumed by Combustion.—The substances which it would be possible, according to known chemical phenomena, to dissipate in the combustion of plants, are carbonic acid, sulphuric acid, phosphoric acid, chlorine, and the metallic bases of the alkalies potash and soda. The other constituents of plant ashes, namely, silica, oxide of iron, lime, and magnesia, cannot, it is conceived, be liable to loss in any form.—*Way.*

Small Holdings.—A small proprietor, who knows every part of his little territory, who views it with all the affection which property, especially small property, naturally inspires; and also, upon that account, takes pleasure not only in cultivating, but in adorning it, is generally of all improvers the most industrious, the most intelligent, and the most successful.—*Adam Smith.*

To Destroy Insects.—Trenching the ground in autumn, or early winter, is one of the best securities against most subterranean insects.

Ladies' Department.

FEMALE AMUSEMENTS OF THE PRESENT DAY.

We are frequently pained to see drawing rooms and parlors filled with young ladies, for hours together, without any visible employment. They have run through an idle, unmeaning round of calls, or profligate, needless shopping in the early part of the day, and a *tea fight*, or *hop*, or a flirting match comes off at night, which consumes the remainder of the mis-spent day. Sad perversion of the intellect and bodies of what should be rational, intelligent, and useful beings.

We boast of advancement in manners, refinement of pursuits—we deem many of the fashions and habits of the present day as *retrogades*, not advances; as approximating closely to the idleness, frivolity, and dissipation of savage life, rather than progress towards one of greater refinement and utility. The good old days of the hatchel, the cards, the spinning wheel, the loom and the bleaching tub, were vastly more consonant to the duties of wives and mothers, and the welfare of the human race, than the present ones of the piano, the guitar, the opera, the polka, and the waltz.

Let sensible women who have right notions of female manners and duties, take the matter in hand before it is too late, and correct the downward tendency of female (mis-called) accomplishments. Provide for the young women the large rim spinning wheel, by which they can dance off some of the buxom hilarity of youth; and for the older ones, or infirm, the smaller, buzzing, sedentary, pedal wheel and distaff, where they can compose and lull their matron sensibilities to the quiet realities of life. "And when the evening shades prevail," let the quiet knitting, with the old-fashioned sheath pinned upon the side, employ the busy fingers of all, as they are gathered round the cheerful fireside of the honest, prudent, and therefore, independent American farmer. Here, both brothers and beaux may learn a lesson of enjoyment, purity, and content, which they may look for in vain amid the saloons of the city, or even would-be-fashionable country life. What more is wanting for success and enjoyment on earth? What more favorable position for preparation for heaven?

EVA.

New York, December, 1848.

TO PREVENT THE UNPLEASANT EFFECTS OF LIMESTONE WATER.

It is well known that in those regions of country where limestone abounds, the water is so strongly impregnated with it (making it too *hard* as it is called), as to render it unfit for washing, and many other domestic purposes, by curdling with the soap—encrusting boilers, &c. Where no other water is to be had, the disagreeable effects may be remedied in some degree, by the following means:—

For washing, the curdling of the soap in the water can be prevented, by boiling a bag of wood ashes in the kettle, which will not hurt the hands so much as ley made in the common way. For cooking, salæratus, in the proportion of about one small tea-spoonful to a gallon of water, will neutralize it sufficiently. For the toilette, its effects upon the skin are sometimes very distressing. I have often known the hands of children as well as those of other people, so chapped by it as to crack open, and bleed. This may be prevented by washing with vinegar, after the hands, &c., have been wiped dry. E. S.

Eutawah, November, 1848.

TO REMOVE STOPPERS FROM DECANTERS.

With a brush and warm water and soap, clean around the stopper; wipe dry and let it grow cold; take the end of the stopper between the thumb and finger of one hand, while, with the other, you hold the neck of the bottle over the flame of a spirit lamp, and turn it round briskly for about a minute, or a longer or shorter time according to the thickness of the glass, and the size of the vessel. The heat will expand the glass of the bottle before it affects that of the stopper, which will come out, almost, with a touch. One that has been broken close off may be removed in this simple way.

E. S.

TO CURE CHILBLAINS, OR FROSTED FEET.

Mix, in a glass vial, a quarter of an ounce of pure muriatic acid, with two ounces of water. Wet a piece of sponge, or soft cloth, with the liquid, and gently bathe the parts that have been frozen. Let it dry on, and wrap the feet in bandages, or draw on a pair of old stockings to keep the bed linen from contact with the acid, which will drop into holes wherever it is touched by it. This speedily cools the inflammation, allays the intensely painful itching, and when the frost is not very deep, it cures by a few applications.

When the chilblains are of long standing, and the skin has cracked, or when sores are formed, the first two or three bathings are apt to cause a smarting pain that is somewhat discouraging to persons unacquainted with the virtues of this simple remedy; but if they will persevere, they will be rewarded by a complete cure. E. S.

Hoarding up Linen.—Amongst the old customs still in vogue in this country, that of hoarding up linen is one of the most inveterate. The following is a singular instance of this habit:—An old maid, 78 years of age, died recently at Tocqueville. This person, who possessed rather a large fortune, lived with extreme parsimony. Her only luxury, her only expenditure, was for linen, which she laid by in her closets. An inventory made after her death proves that in 14 closets she had, in reserve, more than 500 pairs of stockings, nearly 600 chemises, the enormous quantity of 100 dozens of napkins, 12 dozen sheets, an innumerable quantity of caps, handkerchiefs, &c.; and, lastly, linen cloth sufficient to provide for the wants of 500 persons. —*Brussels Herald.*

To Prevent a Bruise from becoming Discolored.—Blood can be prevented from setling in a bruise, by applying to the place, a cloth wrung out of very warm water, and renewing it until the pain ceases. The moisture and heat liquify the blood, and send it back to the proper channels, which by neglect, or the use of cold applications, would be coagulated, and fixed in green and black blotches directly under the skin. E. S.

Boys' Department.

AGRICULTURAL CHEMISTRY.—No. 9.

Soils are divided and named according to their texture; that is, according to the ingredients of which they are composed. You are familiar with the terms *clay*, *sand*, and *gravel*, and know something of the character of the soil to which these names are applied; and you may have read of calcareous, argillaceous, and alluvial soils, without getting any very definite idea of their nature. The design of this letter will be to explain the general and chemical character of different soils, so that when you see or read of any of them hereafter you may know of what ingredients they are composed.

Sandy Soils.—You are well acquainted with the appearance of sand, and are aware that, where it exists in considerable abundance, it forms what is called a sandy soil. Grains of sand are composed mostly of silica (a substance described in my last letter), united with a small portion of alumina (which will be described presently), and oxide of iron (oxygen and iron). When sand is combined with lime, or clay, so as to form solid masses, it is called sandstone, a substance frequently used for building purposes, and for making millstones and grindstones. Sandy soils contain from 60 to 90 per cent. of sand.

Gravelly Soils.—These are so called from the quantity of gravel, or stony particles they contain, and have no distinguishing chemical property. Those in which limestone pebbles abound, are most profitable on account of their capacity for retaining vegetable matter and fertilizing ingredients longer than any other species of gravelly soil.

Clay or Argillaceous Soils.—Clay is a mixture of the earth called *alumina* with silica and oxide of iron. As alumina does not enter into the composition of any vegetable, I did not describe it among those ingredients of the soil which are absorbed by the roots of plants; but its presence in every soil, and the important office it performs in modifying their texture, are sufficient reasons why its nature should be well understood by the agricultural chemist. Alumina is composed of an elementary substance, or base, called aluminum, united with a portion of oxygen. It is one of the essential constituents of the salt called alum, from which its name is derived. I told you alumina was one of the earths. There are ten bodies which chemists designate as *earths*, all of them composed of metallic oxides, but only four of them, viz: alumina, silica, lime, and magnesia are of much importance. Alumina and silica are found most abundant in nature, and their union, when in contact with oxide of iron, and often potash, forms clay. The components of clay are not merely mingled together, as many suppose, but they are chemically combined, and can only be separated by chemical means. Clay does not seem to possess any of the features belonging to its ingredients separately, nor can these ingredients be united by any known chemical process so as to form true clay, such as nature produces. The three or four ingredients of which clay is composed, are united in various proportions, the silica usually being the most abundant. Sometimes 100 parts of clay contain over 90 parts of silica, with variable proportions of potash.

Calcareous Soils.—When lime predominates or exceeds 20 per cent., the soil is called calcareous. When a clay soil contains much lime, it is called calcareous clay, and when lime abounds in a soil otherwise sandy, it forms calcareous sand.

Marly Soils.—These are also soils containing a large amount of lime, and sometimes, though not so much potash as those called calcareous. When the lime is over five, and under 20 per cent., it forms a marly soil. When sand and lime are the principal constituents, the soil is called a sandy marl; clay and lime abounding produce a clayey marl. Marl is often used to improve the texture of soils, and sometimes with much advantage. The presence of lime in any soil may be detected by testing it with muriatic (hydrochloric) acid. Effervescence takes place when lime is present.

Loamy Soils.—Loam is a term very indefinitely used among agriculturists, though always designating a good soil, and one containing considerable vegetable matter and clay. Professor Johnston calls those soils loamy which contain from 30 to 60 per cent. of sand, the rest being clay, lime, potash, and vegetable matter. A loam, where clay predominates, is called a clay loam, and one where sand is most abundant, a sandy loam.

Alluvial Soils.—These are formed by the washings and depositions of rivers, or streams. The ingredients of such soils are determined by the character of the soils through which the streams producing them have flowed. They are always rich and productive, because they contain much animal matter, and as they have been forming perhaps for ages, those ingredients to which they owe their fertility, extend to a great depth, forming an almost inexhaustible supply of nutritive matter for vegetation.

Peaty Soils.—Peat is formed by the decomposition and decay of vegetable matter in low and moist situations. The mud and various substances contained in the water, unite with the remains of mosses and such plants as grow in low grounds, and as the decay of the vegetable matter progresses, all of these substances become intermixed and amalgamate, until a black, compact, spongy mass is formed. This is peat, and where it abounds, it produces what is called a peaty soil. Peat bears a close resemblance to humus, or vegetable mold, which I will describe in my next letter. J. McKinstry.

Greenport, Columbia Co., Dec. 1st, 1848.

The way Domestic Animals Collect their Food.—The horse, when feeding on natural herbage, grasps the blades with his lips, by which it is conducted between the incisiors, or front teeth. These he employs for the double purpose of holding and detaching the grass, the latter action being assisted by a twitch of the head. The ox uses the tongue to collect his food. That organ, being so directed as to encircle a small bundle of grass, which is placed by it between the incisor teeth, and an elastic pad opposite to them in the upper jaw—between these, the herbage is pressed and partly cut, its complete severance being effected by tearing. The sheep gathers his food in a similar manner as the horse, but is enabled to bring his cutting teeth much nearer to the roots of the plants, in consequence of the upper lip being partially cleft. For his upper lip is thin, and is susceptible of considerable mobility; while that of the ox is thick, hairless, with a very limited action.

FOREIGN AGRICULTURAL NEWS.

By the steamer Niagara we are in receipt of our foreign journals to 2d December.

MARKETS.—*Ashes*, a good inquiry. *Cotton*, an advance from one ⅛*d.* to ¼*d.*, with an active demand. *Flour* and *Grain*, dull, with a slight fall in prices. *Provisions* the same. *Hemp*, an advance, and light stock on hand. *Wool*, the demand for foreign continues rather brisk, and the opinion gains ground that the lowest point has been passed. The reports of the public sales in London are more favorable, and prices are considered rather higher than the former sales. In other articles no change.

Money continues very abundant.

American Stocks, a steady demand, principally on account of the continent.

Lock Jaw.—This hitherto fatal disease in animals has recently been cured by a new operation, whereby the animal obtains instantaneous relief. The muscles which were considered to be extensors are now found to be flexors. This important discovery was made by a person named Webb, of Balsham, Cambridgeshire, who has been operating upon a mare belonging to Mr. Adcock, of Linton, which is now well, and going to work.

Great Loss of Sheep at Van Dieman's Land.—The fatal effects of the catarrh in the sheep at Port Philip, is stated to have been dreadful in the extreme. One gentleman has lost 20,000, and other proprietors from 10,000 to 15,000 each.

Cattle Gauge.—This simple little sliding scale enables the person using it to ascertain the carcass weight of oxen, sheep, and swine, by means of a slide fixed in a rule, the gauge point applicable to the case being set to the length, then to the girth, gives the carcass weight in stones of 14lbs. avoirdupois. Several cases are given in illustration of its correctness.—*English Paper.*

India Wheat.—The Royal Agricultural Society of England have received, through Dr. Royle, a supply of varieties of wheat from India, with a request that a trial may be made of their cultivation in Great Britain.

Lusus Natura.—Mr. Attwater, of Bodenham, near this city, has a mare which had been some time grazing in the New Forest, and which some five or six months ago, gave birth to an animal half deer and half horse! Its head resembles that of deer; its legs are slender, but its hoofs are divided; the mane is very curious, and almost baffles description; the color is a bright fawn; the hind quarters are like that of a horse, but the tail is of the deer tribe. The animal, on the whole, is one of great curiosity, and one that chews the cud.—*Sherbourn Journal.*

The Agricultural Products of France.—The waste lands of France, in 1826, were one twelfth part of the whole surface, or ten millions of acres. They have been reduced to near five millions of acres, by the steady improvement in agricultural operations. The arable land in that year was equal to fifty-seven millions of acres. It has been increased by the recovery of waste lands and by encroachments upon the forests to near seventy millions of acres. The products of the soil, in the years 1826 and 1847, as exhibited in the following table, show a steady advancement in agricultural industry.

Products.	1826.	1847.
Wheat,	166,400,000	250,500,000
Rye,	101,600,000	162,000,000
Maslin,	83,200,000	127,300,000
Indian Corn,	17,280,000	33,400,000
Buckwheat,	23,200,000	32,200,000
Oats,	88,000,000	155,230,000
Potatoes,	23,200,000	41,700,000

Railways and Agriculture.—It can only be by this process that agriculture can be improved, and rise to the level of the mechanical arts—that coal can be made a cheap article on farms, and steam labor be introduced. The lead once given in this direction, it will not be long ere portable railways will be devised for farm use, capable of being shifted from field to field, and the mixture of soils will then become a practical operation at a trifling expense. Railways are not in excess. They can scarcely ever be in excess. As well say streets are in excess. Cost of railways may be in excess, but there has never yet been a railway made that will not attract population to its borders, when the interests of the railway owners and land proprietors shall be one and the same. Inferior land bordering on a railway is far more valuable than the richest at a distance. Given, the rails, all else can be made to follow.—*English Paper.*

India Rubber Shoes a Century Ago.—"La Monarchia Indiana," printed at Madrid, in 1723, we find a chapter devoted to "very profitable trees in New Spain, from which there distil various liquors and resins." Among them is described a tree called *ulquahill*, which the natives cut with a hatchet, to obtain the white, thick, and adhesive milk. This, when coagulated, they made into balls, called *ulli*, which rebounded very high when struck to the ground, and were used in various games. It was also made into shoes and sandals. The author continues:—"Our people (the Spaniards), make use of their *ulli* to varnish their *cloaks*, made of hempen cloth, *for wet weather*, which are good to resist water, but not against the sun, by whose heat and rays the *ulli* is dissolved." India rubber is not known in Mexico at the present day by any other name than that of *ulli*. And the oiled silk covering of hats very generally worn throughout the country by travellers is always called *ulli*.

Good Effects of Guano on Wheat.—A correspondent in the Agricultural Gazette, states that in the spring of 1848, one sixth of an acre of three different descriptions of wheat was dressed with guano, on a damp morning, at the rate of two cwt. per acre. At harvest they were each carried to separate barns, with the produce of a like portion of the fields to which no guano had been applied.

White Rough Chaff.

Produce per acre,	bsh.	pk.	qt.
Guano,	21	1	4
Nothing,	18	1	4
Increase,	3	0	0

And 17 trusses of straw.

Red Spalding.

Guano,	24	2	0
Nothing,	18	3	2
Increase,	5	6	5

And 17 trusses of straw.

Essex Red.

Guano,	36	2	5
Nothing,	32	0	2
Increase,	4	2	3

And 15 trusses of straw.

Agricultural College at Cirencester.—We are glad to hear the Royal Agricultural College at Cirencester is in a very prosperous condition, and that the power of nominating students, which is vested in the shareholders, is likely to become a valuable privilege. The opportunity which it affords of acquiring sound agricultural and scientific education, on a farm now getting into a high state of cultivation, is perhaps superior to any other of the kind in this country.—*Worcester Chronicle.*

Editor's Table.

To Subscribers.—Those who receive this number of our paper, and do not wish to continue as subscribers, will please to return it *with its envelope, and unmutilated*, so that the publisher may know the post office to which it is sent; he will then stop it. Direct on a new wrapper, outside, to American Agriculturist, 121 Fulton street, New York. Please *not to write* on the number, as that mutilates and destroys it for any other purpose than *wrapping paper*. Subscribers will do us the favor to pay particular attention to these remarks.

R. L. Allen having, to some extent, been more or less connected with the editorial columns of the American Agriculturist since its commencement, will hereafter act as associate editor with A. B. Allen. We hope this arrangement will prove satisfactory to our readers, and be an additional reason for them to favor the Agriculturist with a renewal of their subscriptions.

Give Credit.—In copying articles from our periodical, exchange papers will oblige us by always giving due credit to the Agriculturist. The production of our articles cost us much time and money, and when transferred to other papers, it is merely an act of simple justice to give us the credit of them. "Render unto Cæsar the things that are Cæsar's."

Changing the Bearing Year of Apple Trees.—Mr. Manning, of Salem, Mass., by cutting off all the blossom buds from a Baldwin apple tree, in the spring of the bearing year, prolonged the time of bearing until the following season, and thus changed the unfruitful year to one of bearing, and *vice versâ*.

Address of John Delafield, Esq.—We acknowledge the receipt of a Penn-Yan paper, containing this address, delivered before the Yates County Agricultural Society, at their late annual meeting on the 29th of September, and we pronounce it one of the best things of the kind we ever read. Surely to such men as Mr. Delafield, our country is largely indebted, and cannot but make progress in agricultural improvement from their example.

European Agriculture and Rural Economy. From personal observation. By Henry Colman. Vol. II., Parts ix. and x. Boston: Arthur D. Phelps. London: John Petherham. For sale by C. M. Saxton, 121 Fulton street, New York. All the preceding numbers of Mr Colman's work, have been devoted to the agriculture of Great Britain and Ireland; these now before us, treat of that of France, Belgium, Holland, and Switzerland. We have as yet only had time for a cursory perusal of these last numbers; but hope to give a more extended notice, with extracts, hereafter. We think the present numbers the most interesting and useful to American farmers, as the productions and climate of the countries of which he now speaks, most nearly approaches our own. This number completes the series contemplated by Mr. Colman. He has recently returned to his native country, where we are sure he will find a cordial and deserved welcome from his family and numerous friends, from whom he has been so long separated. We shall be mistaken if Mr. Colman does not soon favor the public with other valuable matter, collected during his travels abroad.

Ice.—The intrinsic value of ice, like that of metals, depends on the investigation of an essayer. That is to say, a cubic foot Lower-Canada ice is much colder than a cubic foot of Upper-Canada ice, which contains more cold than a foot of Wenham ice. Again, the Wenham or Boston ice contains much more cold than a cubic foot of Cincinnati ice; and thus, although each of these four cubic feet of ice has precisely the same shape, they each, as summer approaches, diminish in value; that is to say, they each gradually lose a portion of their cold, until, long before the Lower-Canada ice has melted, the Cincinnati ice has been converted into warm water.

The Ice Trade.—The entire statistics of the ice trade are highly interesting, not only as evidence of the magnitude it has assumed as an item of commerce, but as showing the indefatigable enterprise of the man Yankee. There is scarcely a nook or corner of the civilized world where ice has not become an essential, if not common article of trade.

The ice trade, but a few years ago a novelty and experiment in the way of commerce, is exclusively a Yankee idea. Ice has become an important and staple item in commerce. The first cargo ever taken from the United States, was shipped from Boston, in 1805, by Frederick Tudor, a gentleman who had previously despatched agents to the West Indies for information touching the enterprise.

Up to 1832, the business was confined to the enterprise of this one individual. At that period, others embarked extensively in it, and in 1833, Tudor extended his operations to Calcutta, Madras, and Bombay. The shipment of ice from Boston in the year 1847, coastwise, amounted to 51,887 tons, making 158 cargoes; shipped to foreign ports, 22,591, making 95 cargoes. The freight, storage, and other expenses on the whole, amounted to $335,151. In the same year, 29 cargoes of provisions, fruits and vegetables, valued at $72,500 cost, were shipped in ice from the United States, to ports where such articles could not otherwise be sent.

Eight ice houses, in Massachusetts, erected purposely for the trade, are capable of containing 141,332 tons. The consumption of ice in Boston alone, in 1847, was 27,000 tons, employing 66 wagons in the delivery. In Havana, ice sells for 6¼ cents per pound, in Calcutta at 2½ cents, in Boston at 13½ cents per one hundred pounds, on the average, and in New York 25 cents for one hundred pounds.

Agricultural Sketches of Black Rock and Buffalo.—The following is a statement of the number of tons of agricultural products coming from other states, by the way of Buffalo and Black Rock, during the last twelve years:—

Year.	Products of the forest.	Products of animals.	Vegetable food.	Other agric'l products
1836...	3,755	1,593	28,207	1,961
1837...	7,104	4,083	29,229	884
1838...	4,615	3,282	58,907	379
1839...	22,835	4,219	70,284	361
1840...	18,133	5,592	111,533	688
1841...	35,126	14,877	188,036	1,480
1842...	26,229	13,590	45,096	1,642
1843...	31,211	16,400	166,327	2,521
1844...	52,061	17,470	165,761	1,757
1845...	72,674	14,963	137,379	1,587
1846...	61,957	23,899	298,970	2,393
1847...	85,539	26,567	532,676	2,996
	421,238	146,535	1,882,405	18,649

In making the above statement, it was assumed that all the flour, wheat, bran, and ship stuffs, cleared at Black Rock, came from other states.

Dandies for Scarecrows.—It is said that everything was placed on earth for some wise purpose, but what under heaven these bipedal nomenclatures were put here for, has always been a mystery to us, and one which we could never solve. To be sure, the things keep a large quantity of bread from moulding, and patronize the tailors extensively on the endless credit system. And then, too, they make very good dolls for soft-pated young women; but what else are they fit for? They have never, as yet, been known to be of any essential service to mankind, neither will they ever be, until they are stuck up in some farmer's cornfield for scarecrows.

REVIEW OF THE MARKET

PRICES CURRENT IN NEW YORK, DECEMBER 16, 1848.

ASHES, Pots,	per 100 lbs.	$6 00	to	$6 12
Pearls,	do.	6 25	"	6 31
BALE ROPE,	lb.	6	"	8
BARK, Quercitron,	ton,	26 00	"	28 00
BEANS, White,	bush.	75	"	1 25
BEESWAX, Am. Yellow,	lb.	19	"	22
BOLT ROPE,	do.	11	"	12½
BONES, ground,	bush.	45	"	55
BRISTLES, American,	lb.	25	"	65
BUTTER, Table,	do.	15	"	25
Shipping,	do.	9	"	15
CANDLES, Mould, Tallow,	do.	11	"	13
Sperm,	do.	25	"	38
Stearic,	do.	20	"	25
CHEESE,	do.	5	"	10
COAL, Anthracite,	2,000 lbs.	4 50	"	5 50
CORDAGE, American,	lb.	10	"	12
COTTON,	do.	5	"	9
COTTON BAGGING, Amer. hemp,	yard,	15	"	16
FEATHERS,	lb.	30	"	40
FLAX. American,	do.	8	"	9
FLOUR, Northern, Southern and West'n	bbl.	5 25	"	5 87
Fancy,	do.	6 00	"	6 50
Richmond City Mills,	do.	7 00	"	7 25
Buckwheat,	do.	—	"	—
Rye,	do.	3 12	"	3 25
GRAIN—Wheat, Western,	bush.	1 10	"	1 31
Red and Mixed	do.	95	"	1 10
Rye,	do.	62	"	63
Corn, Northern,	do.	65	"	71
Southern,	do.	65	"	70
Barley,	do.	62	"	65
Oats,	do.	27	"	36
GUANO, Peruvian,	2,000 lbs.	50 00	"	50 00
" Patagonian	do.	35 00	"	40 00
HAY, in bales,	do.	45	"	50
HEMP, Russia, clean,	ton.	195 00	"	200 00
American, water-rotted,	do.	160 00	"	220 00
American, dew-rotted,	do.	140 00	"	200 00
HIDES, Dry Southern,	do.	6	"	7
HOPS,	lb.	4	"	12
HORNS,	100.	2 00	"	10 00
LEAD, pig,	do.	4 25	"	4 31
Pipes for Pumps, &c	lb.	5	"	7
MEAL, Corn,	bbl.	2 75	"	3 00
Corn,	hhd.	12 50	"	13 00
MOLASSES, New Orleans,	gal.	22	"	28
MUSTARD, American,	lb.	16	"	31
NAVAL STORES—Tar,	bbl.	2 00	"	2 25
Pitch,	do	1 25	"	1 75
Rosin,	do.	1 25	"	1 37
Turpentine,	do.	2 50	"	3 00
Spirits Turpentine, Southern,	gal.	35	"	36
OIL, Linseed, American,	do.	49	"	50
Castor,	do.	1 25	"	1 50
Lard,	do.	65	"	70
OIL CAKE,	100 lbs.	1 00	"	1 15
PEAS, Field,	bush.	75	"	1 25
Black eyed,	2 do	1 25	"	1 50
PLASTER OF PARIS,	ton.	2 25	"	3 00
Ground, in bbls.,	of 300 lbs.	1 12	"	1 25
PROVISIONS—Beef, Mess,	bbl.	9 00	"	13 50
Prime,	do.	5 00	"	7 50
Smoked	lb.	6	"	12
Rounds, in pickle,	do.	4	"	6
Pork, Mess,	bbl.	11 00	"	16 00
Prime,	do.	7 00	"	10 00
Lard,	lb.	7	"	8
Bacon sides, Smoked,	do.	3	"	4½
In pickle,	do.	3	"	4
Hams, Smoked,	do.	5	"	9
Pickled,	do.	4	"	7
Shoulders, Smoked,	do.	4	"	5
Pickled,	do.	3	"	4
RICE,	100 lbs.	3 00	"	4 00
SALT,	sack,	1 25	"	1 45
Common,	bush.	20	"	35
SEEDS—Clover,	lb.	5	"	7
Timothy,	bush.	2 00	"	3 50
Flax, clean,	do.	1 30	"	1 40
rough,	do.	1 20	"	1 22
SODA, Ash, cont'g 80 per cent. soda,	lb.	3	"	—
Sulphate Soda, ground,	do.	1	"	—
SUGAR, New Orleans,	do.	4	"	6
SUMAC, American,	ton,	35 00	"	37 00
TALLOW,	lb.	8	"	9
TOBACCO,	do.	2½	"	7
WHISKEY, American,	gal.	23	"	25
WOOLS, Saxony,	lb.	35	"	60
Merino,	do.	25	"	35
Half blood	do.	20	"	25
Common do		18	"	20

REMARKS.—No changes in the market of sufficient importance to demand notice. Everything is abundant, at good prices, and the general opinion is, that we have a prosperous career before us for several years to come. The gold of California seems all the rage just now; but we trust the farmers of the United States will not be tempted away from their legitimate business to go there to dig for it. Let them recollect that there is plenty of good gold at all times to be had at home for the products of agriculture; then let them continue to strive to increase and perfect these; but, above all, let them study to improve their minds and hearts. In these should be found their contentment and happiness.

TO CORRESPONDENTS.—Communications have been received from M. W. Philips, E. S., Solon Robinson, James E. Cornell, Sergeant Teltrue, Samuel Allen, and Reviewer.

ACKNOWLEDGMENTS.—The New-Brunswick Courier, containing the Annual Report of the St. John Agricultural Society; from R. Sands Tucker, the Sixth and Seventh Annual Reports and Transactions of the Royal Society for the Promotion and Improvement of the Growth of Flax in Ireland; Reports of the First Exhibition of the Worcester County Mechanic's Association, at the Nashua Halls, in the County of Worcester, Massachusetts, September, 1848; from Messrs. Gold, a Catalogue of the Cream-Hill Agricultural School at West Cornwall, Ct.

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4t* Nov.

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ANNUAL MEETING OF THE NEW YORK STATE AGRICULTURAL SOCIETY.

THE Annual Meeting of this Society will be held at Albany, on the third Wednesday (17th) of January, 1849. Premiums will be awarded on Grain and Root Crops, Butter, Cheese, Fruits, &c. Statements should be furnished the Secretary early in January.

It is desired that there should be a full representation from County Societies, as well as of the friends of agriculture generally.

A *Pomological Exhibition* will be held at the rooms of the Society, and growers of fruit are respectfully requested to forward specimens to the secretary as early, if practicable, as the 15th of January. B. P. JOHNSON, *Secretary*.

Nov. 1st, 1848. n3t

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